

THE

Desert

M A G A Z I N E

MARCH, 1941

25 CENTS

Writers of the Desert . . .

Congratulations to DICK FREEMAN! After accumulating enough Desert Magazine rejection slips to plaster the inside of his garage, Dick finally has gained a place in the pages of the DM two months in succession.

Last month his manuscript on desert photography was published, and this month it is an interesting story of his trip to the historic Manly Falls in the Death Valley region.

Dick deserves to gain a place in the journalistic field. For two years he spent most of his evenings taking night class instruction in writing and photography—and at the end of that time he quit his regular job and launched out to sink or swim in the field of free lance journalism.

During the past year he has sold pictures to many publications, and feature stories to *Ford News* and *Popular Photography*.

. . .

Until he came west two and one-half years ago and secured a job as editor of the *Tucumcari*, New Mexico, *Daily News*.

STUART MORRISON was a roving reporter who had worked from New York to Florida and in many of the Mississippi valley states.

Morrison's editorial position has given him the opportunity of close acquaintance with both the Tucumcari irrigation project and the men who are directing this important engineering development, and it is through this association that he has been able to give Desert Magazine readers this month an accurate and complete story of this new reclamation program.

Morrison is 40, has a wife and three children, wants to raise the youngsters in the West, and is known among his associates as "Stu."

. . .

LOUIS P. LesCARBEAU, Jr., whose unusual series of desert tortoise pictures is reproduced in the Desert Magazine this month is an amateur photographer who earns his livelihood as paint shop supervisor at the Douglas Aircraft factory in El Segundo, California.

Many years ago he acquired a couple of

tortoises as pets—and today he has a big family of them. "They take care of themselves," he explains, "feeding on grass and other vegetation that grows in the backyard."

In answer to a question about the care a mother tortoise gives her young, he said: "The adult tortoise lays her eggs and then forgets about them, leaving the young ones to hatch out when they are ready and then shift for themselves. Occasionally, out of sheer curiosity, the adults will approach the newly hatched babies, look them over and take a sniff or two, and then go on about their business. I think they are what you would call 'rugged individualists.'"

. . .

JOHN HILTON is taking time off from his writing and painting to manage the mineral display at the Riverside county fair at Indio, California, February 20-23. HARLOW JONES, who accompanies Hilton on many of his field trips as official photographer for the Desert Magazine, is cooperating with Hilton in the presentation of a kodachrome picture program as one of the features at the fairgrounds. Between them, they have one of the finest collections of colorful desert photography in both stills and movies to be found anywhere.

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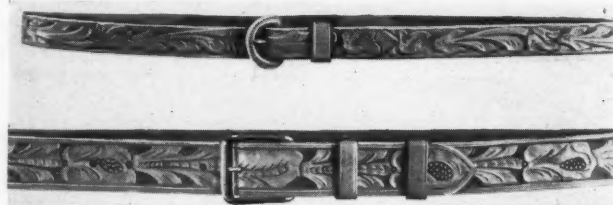
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DESERT Calendar

- FEB. 27-MAR. 1 District basketball tournament at Santa Fe, New Mexico high school, followed on Mar. 13-15 by state tournament. Paul McDavid in charge.
- MAR. 1-2 Horse races at Phoenix, Arizona. Harness races March 2, 9, 16, 23, 30.
- 1-9 Imperial county's 12th annual fair, Imperial, California. Dorman V. Stewart, secretary-manager.
- 2 Student cowboys and cowgirls of University of Arizona hold fourth annual rodeo at Tucson city rodeo lot.
- 2-23 Utah State Institute of Fine Arts to hold 39th annual exhibit in the Capitol building, Salt Lake City. Elzy J. Byrd in charge of arrangements.
- 9 Superstition mountain trek, sponsored by the Dons of Phoenix, Arizona. J. C. Bonnell, president. Reservations limited to 400.
- 21-23 Arizona state sewage and water works convention in Yuma, Arizona.
- 23 Scenic and historical tour to Cabeza Prieta game refuge dedication near Tule Wells, Arizona. Sponsored by Yuma county chamber of commerce.
- 23-25 New Mexico Cattle Growers association to hold annual convention in Albuquerque.
- 26-28 American College of Surgeons convene in Salt Lake City, Utah. Surgeons from 11 Western states to attend.
- 26-29 Desert Circus in Palm Springs, California. Earl Gibbs, president of Palm Springs Field Club, chairman.
- 27-30 Horse show, Phoenix, Arizona.

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Volume 4

MARCH, 1941

Number 5

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On Manly's Trail in the Panamints

Looking down South Park canyon from a point on the cliffs above Manly Falls. Panamint valley below and the Argus range in the background. The Manly-Bennett-Arcane party descended this canyon 91 years ago.

By DICK FREEMAN
Photographs by the author

When William Manly and John Rogers brought aid to their starving companions in Death Valley in 1849, one of the most serious obstacles they encountered was a precipitous waterfall high up in the Panamint mountains. Thanks to the sure-footedness of a sturdy pack mule they won through and saved the lives of their companions. John Thorn-dyke, a mining man, and Superintendent T. R. Goodwin of the Death Valley national monument are reasonably sure they have located that waterfall, which Manly described so graphically in his book. Recently, Dick Freeman and two companions undertook to secure photographs of this historic spot for Desert Magazine readers—and here is the story of their excursion into that arid mountain wilderness.

"WE found the little mule stopped by a still higher precipice . . . Our hearts sank within us and we said that we should return to our friends as we went away—with our knapsacks on our backs—and hope grew very small."

Thus wrote William Lewis Manly in his remarkable book, *Death Valley* in '49, of the precipitous falls which almost wrote finis to himself and John Rogers as they returned with food and supplies to the Bennett and Arcane families, stranded and starving at one of the waterholes in Death Valley.

Manly's book was written from memory many years after his heroic trip. Since he kept no day-to-day record of his journeys, an accurate retracing of his route between Los Angeles and Death Valley was considered practically impossible. Consequently, until recently Manly Falls has been only a name rather than a reality.

In the fall of 1940 I learned that Manly Falls recently had

The DESERT MAGAZINE

been located, also the spring he found a short distance above the falls. The re-discovery of the falls and the spring provide a definite key to the Manly-Rogers route through the Panamints, across Panamint valley and into the Argus range on the west side, and unlocks one more door to the history of the trials and sufferings of this group of heroic pioneers.

Knowing that T. R. Goodwin, superintendent of Death Valley national monument had devoted time and research to this route, I went to see him.

"Do you believe Manly Falls actually has been located?" I asked him.

"Oh yes, quite definitely," he replied. "Everything that Manly said about the falls and the spring tallies with what has been found. Sometime ago I loaned my copy of *Death Valley in '49* to John Thorndyke, who has mining properties located high in the Panamints in South Park canyon. A few days later John came to me and said excitedly, 'Why do you know those falls Manly tells about in his book, that the little mule had such a hard time getting over, and the spring just above them, are on my property in South Park canyon? His description fits perfectly—even part of the ledge along which the little mule crept is there—my pipe line from the spring to my mine runs along it.' Later, I accompanied Mr. Thorndyke to the place, and I believe he is right," Goodwin added.

Manly and John Rogers were members of the Sand Walking company of gold-seekers who left Salt Lake City in the winter of 1849 to follow a southern route to the California gold fields. Dissension in the wagon train over the routes to be followed caused a split in the ranks and by the time the surviving members reached California there were 16 separate groups.

The Bennett and Arcane families, with whom Manly and Rogers were traveling, eventually reached the floor of Death Valley in a starving condition. The two young men volunteered to go ahead and bring back provisions and horses, since it appeared impracticable to get the wagons over the rugged Panamint and Argus ranges. They struggled through to Los Angeles and obtained two horses and a mule, and with pack loads of provisions, started the return trek to Death Valley.

The two men were scheduled to return within 15 days, but due to many unlooked for hardships and mishaps they gradually fell behind. As the days passed they feared the little group in Death Valley would become impatient and attempt to struggle through on their own, which attempt would probably end in tragedy.

As they neared the Panamint range, their two horses, unused to desert travel and with little water and forage, became weaker and weaker and it began to appear doubtful if their strength would hold out. The mule however, got along well and carried most of the provisions. The two men finally reached the eastern edge of



Spring 300 feet above the falls where Manly and Rogers obtained water for themselves and their mule. The recess where the spring is located is so dark it required an eight-second exposure to obtain this picture. The man is Henry Beaver who accompanied Dick Freeman to this region.



Manly Falls as it appears today. The shrubs at the bottom of the picture are growing in the debris which has filled in below the falls to an estimated depth of 20 feet since Manly and Rogers came this way. The ledge over which the mule was taken is just to the right of the picture.



the Argus range overlooking the Panamint valley. On the opposite side towered the lofty Panamints.

Quoting Manly: "The range was before us, and we must get to the other side in some way. We could see the range for 100 miles to the north and along the base some lakes of water that must be salt. To the south it got some lower, but very barren, and ending in black dry buttes. The horses must have food and water by night or we must leave them to die, and all things considered it seemed to be the quickest way to camp to try to get up a rough looking canyon (South Park canyon) which was nearly opposite us on the other side."

They crossed the salt lakes and a briny stream on the valley floor (Panamint valley). Said Manly: "We now went directly to the mouth of the canyon we had decided to take, and traveled up its gravelly bed. The horses now had to be urged along constantly to keep them moving and they held their heads low down as they crept along, seemingly so discouraged that they would much rather lie down and rest forever than take another step. We knew they would do this soon in spite of all our urging, if we could not get water for them. The canyon was rough enough where we entered it, a heavy up grade too, which grew more and more difficult as we advanced, and the rough, yellowish, rocky walls closed in nearer and nearer together as we ascended."

It was late in the afternoon. The horses lagged more and more. One small obstruction in the canyon nearly stopped them, but the mule skipped nimbly around it. Finally the little group came to a small dry falls over which the horses could not mas-

ter enough strength to climb. They saw the horses must be abandoned. Wrote Manly: "We removed the saddles and placed them on a rock, and after a few moments' hesitation—moments in which were crowded torrents of wild ideas and desperate thoughts that were enough to drive reason from its throne—we left the poor animals to their fate and moved along. Just as we were passing out of sight the poor creatures neighed pitifully after us. One who has never heard the last despairing, pleading neigh of a horse left to die can form no idea of its almost human appeal. We both burst into tears, but it was no use; to try to save them we must run the danger of sacrificing ourselves and the little party we were trying so hard to save."

Early in December of 1940—just 91 years to the month after Manly had made his trip—I decided to see Manly Falls and make a photographic record of them if possible. Accordingly, in company with Henry Beaver and Emil Steiert of Los Angeles, I left town and headed for the old ghost mining town in Panamint valley known as Ballarat. At Ballarat it is wise to inquire of Bill Gray or "Seldom Seen Slim" Ferger, regarding the condition of the roads thereabout, as either of these two men knows every inch of the country for miles around.

We found "Seldom Seen Slim" at home. To my inquiry regarding the whereabouts of Bill Gray and the condition of the road up South Park canyon, he replied, "Bill's down working on the road in Goler wash, and about South Park canyon—it's pretty steep."

Slim then looked under the car to check for clearance and inquired of the car's condition. "Car's in good shape," I re-

plied, "always keep it that way for these tough desert trips."

"You won't have any trouble," he said, nodding his head approvingly. "Up at the end of the road you'll find only one family—the Clines—they're working the Molly McGuire mine and you'll find 'em mighty nice folks. South Park canyon is the second road to your left as you leave here going south—you can't miss it."

At 3.1 miles the turnoff to the left to the old Cecil R. gold mine—now abandoned—was passed. At exactly 4.0 miles the road up South Park canyon forked to the left. Up it we headed. Soon I had to drop into second gear and then into low. Up the road soared, up and around first one hairpin turn and then another in rapid succession. As we rounded a particularly rough bend the rear wheels bounced like a bucking bronco, the motor roared and thundered under a nearly wide open throttle. We were really going up.

My companions held on with both hands and feet and looked questioningly at me. "Don't worry boys," I said with a confidence I didn't exactly feel, "we'll make it OK."

"Did you say," Henry yelled accusingly at me above the roar of the motor, "that over \$70,000 had been spent on this road?"

"Sure," I grinned, "that's right, but you must remember it doesn't take long to spend \$70,000 on a mountain road—especially this one."

After nearly two miles of this tough going we came out upon a small plateau or bench that afforded a marvelously clear and unobstructed view of the Panamint valley for many miles both north and south. On the opposite side of the valley



Bess and Bob Cline and their burros Pete and Shony. The Clines have a cabin high up in the pass and the burros are used to pack gold ore down from the Molly McGuire mine. The ore is stacked in front of the Cline home, and later packed down to the Bante cyanide plant.

the Argus and Slate ranges stood out with a clear brilliance that was almost startling. Just to the south of us the walls of South Park canyon fell off sharply, their lower reaches hidden in deep shadow.

The bench was a good camping spot, but visitors should bring their own water as it is a dry camp. After taking some pictures and cooling the motor for a few moments, we went on. We started to climb, and then our route suddenly dipped to the right and we entered the shadowy canyon. Here the walls rose steeply on either side of us. A few flowers clinging to the ledges were a distinct surprise as no one would expect flowers to bloom at this altitude in December.

We left the car and hiked down the rough canyon floor for some distance. Large boulders obstructed our passage. The canyon walls were of a yellowish color as Manly described them and the grade was steep. It was easy to see that tired and thirsty pack animals would have a difficult time ascending this gorge. Returning to the car we went on; shortly a tent house appeared, known as Slim's camp. The camp was formerly owned by Ferger. It seemed to be clinging partially

to the canyon wall, and was raised just high enough from the floor of the gorge to avoid (if it was lucky) any sudden cloudbursts that might roll down the canyon. This tent-cabin we found out later to have been the one time headquarters of a mine located high on the canyon walls—and now abandoned.

Slowly the car crept up the grade. We hadn't been out of low gear since the first quarter of a mile from the valley road.

Directly we passed a narrow precipitous road leading off up the cliff trail to the left to the ranch and cyanide plant of Henry Bante.

A short distance beyond the road left the canyon floor and zig-zagged up the south face of the canyon. At the top we came into an open area in which were located three small cabins. At 6.1 miles we stopped the car—nearly at the end of the road. During our progress up this steep mountainous grade we had climbed in six miles from 1000 feet elevation in Panamint valley to nearly 6000 feet. The grade had averaged from 15% to 26%, most of it had been over 20%.

From the tent-cabin a small column of blue smoke rose in the clear desert air. As

we approached this cabin a pleasant-faced woman came out and at my inquiry she said she was Mrs. Cline.

"It's not very often we have visitors up here," she smiled, "but when they do come they're very welcome. Won't you come in?" she invited.

Stepping inside and surveying the neatly arranged interior, one of the first things that caught my eye was a copy of the December issue of the Desert Magazine.

"I see you take the Desert Magazine," I said, a little surprised at finding a late copy way up there in the mountains.

"Do you know," replied our hostess, "that is the first copy I have ever had of that magazine. I never dreamed such a fine magazine about the desert and the people living in it was being published. I'm going to get more copies."

Our conversation naturally led to Manly Falls and Mrs. Cline directed us up the little footpath back of the cabin, which she said followed the pipe line for a mile to the falls and spring, the spring being about 100 yards above the usually dry waterfall. We took the trail. A burro was watching us from a point high up on the south canyon wall. Whenever we would stop and call to him he would move rapidly away, but as soon as we started ahead

again he would stop and continue eyeing us. After passing an old boiler or tank, which was being used as an intermediate reservoir on the pipeline, the falls suddenly came into view around the bend.

Manly had mentioned an overhanging north wall—and there it was, no mistake about that. The south wall sloped back somewhat, but was not as parallel to the north wall as Manly described. However, the wear and tear of erosion during the past 91 years could easily account for that difference. There is no doubt that during the intervening years the contour of the falls had changed considerably. Great amounts of rock and debris have fallen off the cliffs into the gorge below the falls and considerable sand and gravel have also filled in. The upper end of the little ledge along which the mule crept could be plainly seen, but the lower end was buried beneath the debris which had gradually built up.

Let us see what Manly said about the falls: "It was a strange wild place. The north wall of the canyon leaned far over the channel, overhanging considerably, while the south wall sloped back about the same, making the walls nearly parallel, like a huge crevice descending into the mountain from above in a sloping direction. We decided to try to get the confident little mule over this obstruction. Gathering all the loose rocks we could and piling them up against the south wall, beginning some distance below, putting all those in the bed of the stream and throwing down others from narrow shelves above, we built a sort of inclined plane along the walls, gradually rising until we were nearly as high as the crest of the fall. Here was a narrow shelf scarcely four inches wide and a space of from twelve to 15 feet to cross to reach the level of the crest . . . We fastened the leading line to her and with one above and one below we thought we could help her to keep her balance; if she did not make a misstep on that narrow way she might get over safely. Without a moment's hesitation the brave animal tried the pass. Carefully and steadily she went along, selecting a place before putting down a foot, and when she came to the narrow ledge she leaned gently on the rope, never making a sudden start or jump, but cautiously as a cat moved slowly. She must cross this narrow place over which I had crept on hands and knees or be dashed down 50 feet to certain death. When the worst place was reached she stopped and hesitated, looking back as well as she could. I was ahead with the rope, and I called encouragingly to her and talked to her a little. . . . She smelled all around and looked over every inch of the strong ledge, then took one careful step after another over the dangerous place . . . Then another step or two when, calculating the distance closely, she made a spring and landed on a smooth bit of rock below that

led up to the highest crest of the precipice, and safely climbed to the top, safe and sound above the falls."

And so they got the little mule safely over the worst obstruction of the entire trip. The falls today are not as spectacular as Manly describes them 91 years ago. Nevertheless we found them interesting. Brush and plants have grown in the debris which is piled directly below the falls. Today most horses and mules would have little difficulty in working their way around the falls on the south side.

We believe we identified the smooth bit of sloping rock to which the little mule sprang from the narrow ledge; this spot is just to the left of the end of the ledge.

The 300 feet from the falls to the spring is filled with willows. Just before reaching the spring the remains of an old gold ore stamping mill is seen. This mill was in operation about 25 years ago, when ore was hauled in from Middle Park canyon and Pleasant canyon over a road leading into Middle park and thence down into South Park canyon from above.

Said Manly: "Around behind some rocks only a little distance beyond this place (referring to the falls) we found a small willow bush and enough good water for a camp."

The spring now seeps from a shallow rock cave, which gave evidence of having been constructed many years ago. Thorndyke's pipe line runs into this cave and takes most of the spring water down to

the mine cabins one mile below. A few feet above the spring we found the remains of some old wagons; these remaining pieces could not possibly have been parts of the old '49er wagons, because the wheels were too small and of more modern design than the early type. It has been suggested that these old wagon parts were portions of the wagons used 25 years ago by the miners who hauled their ore from Pleasant canyon and Middle Park canyon.

After negotiating the falls, Manly and Rogers and the mule had no trouble in reaching the Bennett camp in Death Valley. Overjoyed at the successful return of Manly and Rogers, the little group made plans for the journey to Los Angeles over the same route the boys had just come in on. Trouble was expected getting the oxen down over the falls.

Said Manly: "The first thing Bennett and Arcane did was to look round and see the situation at the falls, and see if the obstacle was enough to stop our progress, or if we must turn back and look for a better way. They were in some doubt about it, but concluded to try and get the animals over rather than take the time to seek another pass, which might take a week in time. We men all went down to the foot of the falls, and threw out all of the large rocks, then piled up all the sand we could scrape together with the shovel, till we had quite a large pile of material that would tend to break a fall."

The oxen and the little mule were then pushed over one at a time and there were no fatalities as the animals all lit on their feet in the soft sand—the only damage being a few cuts and bruises. The little group proceeded down the canyon until they came to the dead horses.

From here on their troubles were not of such a strenuous nature. The route has been quite definitely determined as crossing Panamint valley, then up and over the Argus range and down through Mountain Springs canyon to some springs in Owens valley now known as Indian Wells. From here they worked their way south, following the old Jayhawkers trail through Red rock canyon and eventually into Los Angeles by way of San Fernando valley.

Returning that evening down the canyon we made our way to the cabin of John Thorndyke, which he had kindly placed at our disposal. We were met by the Clines, Bob Cline having returned from his day's work at the Molly McGuire gold mine. They invited us to have dinner that evening and breakfast the next morning.

Manly and Rogers and the Bennetts and Arcanes bequeathed to this remote desert region a fine tradition of courage in the face of terrifying obstacles.

In their cozy little cabin near the top of the pass, Bess and Bob Cline have created an atmosphere of courage and hospitality worthy of the pioneers who first came this way.

PHOTOGRAPHY CONTEST

Closes March 1

Photographers, both amateur and professional, have until March 1, 1941, to submit entries in the Desert Magazine cover contest announced last month.

Prizes of \$15.00 for first and \$10.00 for second, and \$3.00 each for all accepted pictures not winning prizes, will be paid by this magazine immediately after the judging which will take place March 2.

The contest is limited to desert pictures, but includes a wide variety of subjects, preferably close-ups, of wildflowers, animals, cacti and other shrubs, reptiles, Indians, birds—in fact any subject that belongs essentially to the desert.

For more complete details of the contest refer to page 26 in the February, 1941 issue of the Desert Magazine. Non-winning pictures will be returned when postage is enclosed. Address entries to:

COVER CONTEST.
The Desert Magazine
El Centro, California

The Old West produced five picturesque characters: Scout, Trapper, Freight, Prospector and Cowboy. Here is the story of a man, now 85, who was all five of them. Captured by the Indians at the age of five he followed the western trails long before there were railroads and highways and today he lives in a little trading post by the side of the road between Winslow and Holbrook, Arizona.

'The West Wasn't so Wild,' Says San Diego Rawson

By OREN ARNOLD

He was seated in a rustic rocker against a canopy made of buffalo hide, and the dark animal hair was theatrical contrast to his own coloring. He seemed to have bleached from centuries in desert sunshine, for his head was snowy and so were his mustache and his ancient rawhide jacket. He was patriarchal, and somehow more magnificent than ever.

We stood at our car a minute, looking at him.

"That is Frederick San Diego Rawson," I whispered to my companion. "You must come and meet him."

"Why?" my eastern guest naturally asked.

"Because he—you—well, because he is the pioneer West in all its worth and beauty. Come on!"

He was sitting erect, face toward us, but he did not see us as we approached. He was looking far away. I think into the Hereafter. His very presence sent a panorama parading through my mind—a procession of wagons and oxen and horses and mules and women in sunbonnets and men in black beards, all that amazing band who made America great just yesteryear and left us a heritage of courage and strength.

We spent an hour with him this time. It may have been a farewell, because age has so enmeshed him that he may be gone before I get back to his little roadside trading post near Holbrook, Arizona. No matter; I knew him 15 years ago when he was still young (71!) and full of his gingery fun. His last stand is as he wanted—to sit quietly and peacefully in an isolated western village, near a few friends who will care for him and not disturb his thoughts. The trading post is his own, a tiny museum-store of Indian things in the land of the Hopi and the Navajo.

Frederick Rawson is the one man in my western acquaintance who has actually experienced most of those adventures in the story books. The wild West produced only five really picturesque white characters—the Indian scout, the trapper, the wagon freighter, the prospector, the cowboy—and Rawson was all five of these. While modern life is streamlined around him, he can tell of driving mule wagons from Vancouver to Mexico and ox teams from Colorado to the coast. He has spent approximately 60 years in the saddle, found lost gold mines, worked as clown in a circus, shot bison and grizzly bear and published original poems. Until recently his mind was as alert and keen as that of the famous man he came to resemble — Mark Twain.

His career started when he had just reached the maturity of five years. A wagon master h'isted him up on the back of a lead ox on a train about to pull out of a little Michigan town just after the Civil War. Only relative was a slightly older



Frederick San Diego Rawson. He's been following the western trails for 81 years.

brother who rode the ox beside his. Foster parents had started them west with friends to hunt fun and fortune.

First really big fun—call it that—came a few months later when a weird, hysterical yodeling broke the stillness around the three hundred encamped travelers one dawn. In a matter of seconds, Cheyenne Indians had engulfed the camp.

They came shouting and shooting, cutting and killing and shrieking like the fiends they were. Little Freddie Rawson heard them from his bed in a wagon. He peered out. Yonder were grown friends being massacred before his very eyes. He dropped the wagon flaps and jumped frantically into a nearly-empty flour barrel. A moment later his brother crouched down on top of him.

When the bloody business was done, Freddie and his brother were the only whites left alive. Cheyennes bore them off as slaves, and kept them in captivity for a year. Then Arapahoes came along and bought the two little boys for five horses, kept them another year until United States soldiers got them safely away.

"All in all, I figure the red man is a pretty good sort," said Frederick Rawson when we last talked. "He stood by his rights as he saw them. It was the white man who made the Indian savage."

"The first thing Christopher Columbus did when he discovered America was to throw a bunch of red men in irons to take back home. To their credit they wouldn't work. If they had, the

Indians would have been slaves in America instead of the blacks.

"Neither the Cheyennes nor the Arapahoes treated me badly. Looking back now, though, I can feel insulted, not being valued at no more'n five little old range hosses!"

The U. S. cavalry troops who had rescued Freddie Rawson saw to it that he was returned to Michigan. And it was nearly 10 years before he bobbed up in the West again, this time as a taxidermist in Colorado Springs. From that job he started prospecting for gold, and in the ensuing years has been to about every place worth while west of the Mississippi, meeting with many failures and some successes, acquiring an education that no books could give and yet reading every book he could get.

He was in the Klondike gold rush. "That stampede was far worse than it has ever been pictured," says he. "Where one man out of a thousand struck it lucky in the California gold fields, one man in fifty thousand got rich in Alaska. The suffering and the trials up there will never be known."

"Yes, I've had much excitement from time to time. I mind an old hermit I knew in Alaska. This old man went hungry and worked and fought for years seeking gold and worshipping it. He lived alone except for his pack mule, Jack. He disappeared and we never saw or heard about him, but years later I happened onto his cabin. Outside the door was the skeleton of Jack. Inside the door was the skeleton of the old man himself, his hand outstretched toward the door."

"The old coot died alone, but before dying he had crawled to the fireplace and got a hunk of charcoal. On the inside of his door he had writ his last message:

GOLD HID IN THE BUNK

"And there in the bunk it was. Great bags of wealth he had dreamed and slaved and starved and died for, and never got to enjoy. From that minute I stopped trying to build a money fortune, and I have had peace in my heart ever since. I wish every man could understand what I mean. Every man everywhere!"

In a reminiscent mood Rawson tells of the train robbers down near the Mexican border back when Jesse James and Billy the Kid and the Daltons were all fresh synonyms for terror in the American West.

"About the first thing I knowed," Mr. Rawson chuckled also at this memory, "me and the whole car load of passengers was standing outside holding up our front paws like a row of little puppy dogs. It was downright comical."

"On the train was one passenger with a powerful big hat. Now the bandits made us all take off our guns and pile 'em up when we come out of the train, but this big-hatted man wanted his gun back, so he up and asked for it."

"'Whut use you got for a gun?' the bandit growled. 'Ef you was gonna use a gun, whyn't you use it a while ago when we fust got heah?'"

"The whole crowd of us bust out laughing—whaw! And, seeing that, the robbers up and made Mr. Big Hat dance for all of us. It was shore fun. But they took our money. It was months before a federal detective joined the bandits, in disguise, and got the drop for an arrest. Last I seen of 'em they was dancin' from ropes—without touching the ground."

Not all of San Diego Rawson's recollections are of blood and death and wild western doings. In fact nothing infuriates him more than to imply that our pioneers lived eternally in danger and violence, as many story books would have us believe.

"People were calm and happy when I was young," he declares. "Men and women and little children lived together in peace and safety. Visited one to the other and such. Courted and married. Sung songs and found time to play. All in all, the old West wasn't no worse, maybe not as bad, as the country is today."

"We didn't have the advantages we have now. I personally graduated from school after the first year when I slung my

algebra out the winder and never brought it back. But during a lifetime in the saddle, as you might say, I have never been without one or two good books. On science. On religion. On philosophy. On whatever subject I could lay my hand to.

"We had the same hearts back in 1870 that we got now. Hearts don't change, unless the people do. Just the circumstances change. Whether 16 or 60 there is in every normal heart the lure of wonder, the longing to solve this mystery of life. We were trying to solve it back there; we're still at it."

"I don't hold to this idea of growing old. I don't figure to get caught at it. People grow old by deserting their ideals, or never having any. Now taking it all in all, I would rather have more ringing laughs and cheery songs, fewer droning hymns and moans from the 'Amen' corner."

Mr. Rawson is one of the country's men most skilled at reading the meaning of Indian inscriptions and writings on rocks. Some of the later inscriptions are comparatively easy to interpret, but Americans must find an Indian Rosetta stone, Mr. Rawson declares, before accurate knowledge of the Indians' origin, and of America's first settlement, can be determined. At present we have many pictures, many carvings, suggesting many possibilities, but there is no key for definite translation.

"We know," says he, "that the earlier Americans were direct descendants of European or Asiatic races, and possibly had regular communication with other continents. That dates back to a time before the Bering Strait was formed."

"In some western states, for proof, are Indian mazes on basketware, and carved and painted on rocks and such, that are identical with a maze found on the Isle of Crete in southern Europe. The complicated pattern of the maze is such that the duplication could not have been a mere coincidence."

"In one prehistoric ruin was dug up a bone or ivory carving almost exactly like the present Masonic emblem, the compass and square. It was found in a house old and crumbling centuries before Columbus arrived. Where did it come from? Masonry originated, we know, about Solomon's time. Who brought it over here?"

Best of all—if you can spare long hours to sit with him—is to hear his account of covered wagon travel. Only a few people remain now who can tell you of wagon trains first hand, and in another decade this living contact with the past will be gone entirely. The fascination of Mr. Rawson's narrative is in its rich detail—the way we made butter by tying a pail of milk on the wagon axle to churn as we bounced along; the time I whittled out a fine axe handle as I rode, only to have some careless girl mistake it for firewood and burn it; how I happened to learn that hair on a horse slopes toward his tail, but on a cow slopes mostly forward; the time Miss Dosca Pratt learned to be fashionable around the campfire by taking her first dip of snuff; the way we'd speculate in the lonely hours on trail about what heaven is like, usually measuring it by earthly pleasure. To hear Frederick Rawson talk in this vein is to sense the whole tang and tempo of western life 60 years ago, in a way no printed word can give you.

Throughout all his serious conversation is that leavening of humor. Lordy, what a blessing if each of us could carry a sense of humor through our old-age years!

I can recall, for instance, the last thing I asked him, and the answer he gave. It is something to paste in a man's hat.

"Mr. Rawson," said I, "you have lived very long and done many things. You appear quite happy. Have you a fixed plan for living in a proper way? Is there some ideal for a daily routine?"

The old fellow beamed and looked almost saintly in his grandeur.

"Son, I have figured that out, and practiced it," he answered. "I can tell it in a sort of rhyme I made up:

"A little work and a little smile,
A little cheer and a little guile,
A little 'bull' (as the boys would say)
And you've laid out your perfect day!"

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*Arch Hurley of Tucumcari.
Conchas dam and reservoir above.*

TWENTY-FIVE years ago Arch Hurley, then a young man, looked out over the vast expanse of sun-baked desert which surrounds the city of Tucumcari, New Mexico. It was not a prepossessing picture: an unbroken plain, stretching 40 miles to the mountains surrounding this valley on all sides: cactus, mesquite and sparse native grasses its only vegetation. Water scarce, deep and difficult to find; wells short-lived and expensive.

"What we could grow here if we only had water!" Hurley exclaimed.

But he did not stop with wishing. That young man began seeking the solution of the water problem with the same tireless

Desert sunshine and soil and water will make a fertile garden—but it sometimes takes a tremendous amount of work and skill and courage to bring the three elements together. Here is the story of a typical irrigation project—one of many hundreds that dot the arid region of the West—and of the man who had the vision and enthusiasm to follow through in spite of obstacles which at times appeared insurmountable.

energy he devoted to his business. He has, with the passing of a quarter century, become not only the owner of two prosperous theaters in this small city of 6,200, but he has, by his efforts as a member of the Arkansas Basin committee and of the National Rivers and Harbors congress won the esteem of the Bureau of Reclamation to such a high degree that in a recent bulletin the bureau listed Arch Hurley as "one of the six men designated by the Na-

tional Reclamation association as being the most helpful to irrigation throughout the west."

Near the city of Tucumcari flows the Canadian river. Most of the time it is just a trickling desert creek. But on certain occasions it becomes a roaring, devouring monster, its foaming wall of tumbling water gouging away the precious soil and racing with irresistible force down through Oklahoma and Texas at a furious pace,

The Man Who Brought Water to Tucumcari

By H. STUART MORRISON

strewn wreckage and destruction in its wake.

"If we could only send some of that Canadian river out across this desert, what a farmers' paradise this Quay valley could become," Hurley mused.

Today—after a quarter century of unceasing promotion of that idea, Arch Hurley gazes out the window of his theater at the land which, within a comparatively short time, will be watered by a network of irrigation ditches.

For Hurley's 25-year campaign has brought victory. It has resulted in the construction by the war department of Conchas dam, at the confluence of the Conchas and Canadian rivers, at a cost of \$16,160,000. The dam was completed in September 1939. Already it has stored enough water to form a lake that stretches 10 miles up each river, and by the time the irrigation canals are completed the lake will be 28 miles long.

Immediately after completion of the dam the Bureau of Reclamation began construction of the Tucumcari Irrigation project, which, when completed, will have cost \$8,655,000. From the headworks of the dam the earth-fill canal already stretches out across the wastelands, snaking its way between mountains for 38 miles to Tucumcari, where it will spread water over 45,000 acres of desert land.

In recognition of his work in behalf of this project, it has been named the Arch Hurley Conservancy district. Hurley owns a considerable acreage of land in the area, but his holdings have all been put under contract with the Reclamation Bureau,

which means that in the near future they will be redistributed to incoming settlers.

For this irrigation project, the only one in the history of this country to be subsidized by the federal government through an outright PWA grant of \$2,500,000, is going to do more than merely irrigate the lands of farmers and ranchers in Quay county, New Mexico. It is also going to throw open to purchase at reasonable prices an enormous acreage, with the small farmers who will occupy it protected against land-sharks by the Bureau of Reclamation.

There are 81,000 acres in the irrigation project, of which 45,000 are designated as irrigable land. It is estimated 25,000 acres of this will have to be sold by its present owners, in 160 and 320-acre tracts, since the holdings of individual owners are restricted in size. This land, it is provided, must be sold at approximately the federal appraisal value, and since excess prices will redound to the benefit of the buyer himself, there is not much danger of the "get-rich-quick" boys muscling in on the deal.

When Arch Hurley came to Tucumcari in the early days of the town, he found it a rough-and-ready settlement, spawned in 1901 when the Chicago, Rock Island and Pacific railroad established it as a construction camp. A huddle of shanties and warehouses, Tucumcari first came into existence under the highly descriptive name of "Six Shooter Siding." It was all of that, in the years before law and order brought about a reformation and a change of name to Tucumcari.

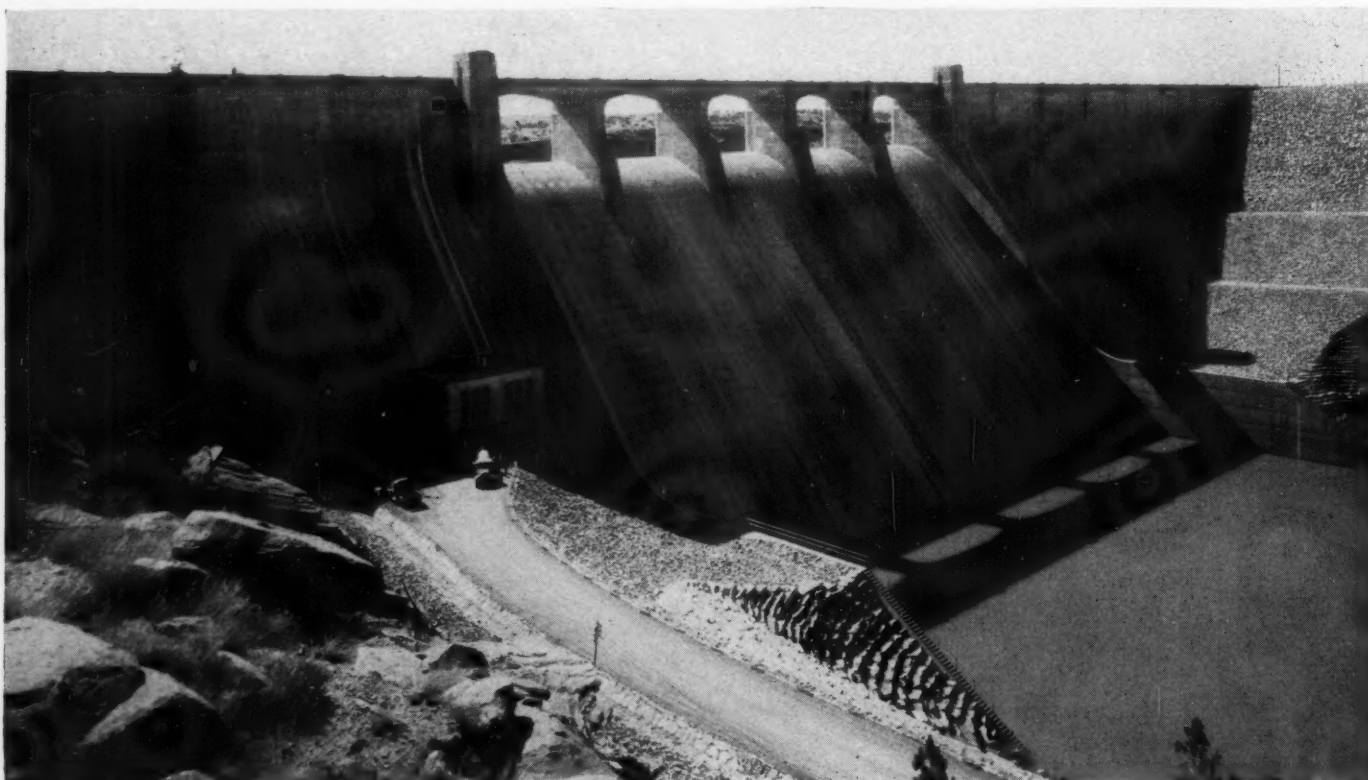
Hurley arrived in Tucumcari a poor boy, but by tugging mightily at his bootstraps, lifted himself to a position of respect and wealth in the community. He first opened an eating house for railroad workers; expanded it into a boarding house, and then opened a motion picture theater.

It was 30 years ago that William B. Freedland, a civil engineer of Logan, New Mexico, conceived the idea of irrigating the surrounding desert with the waters of Ute creek. In 1912 Freedland memorialized the state legislature with a lengthy opinion, but his plan was pigeonholed. However, it did serve to show Arch Hurley what might be done. Hurley turned to the Canadian river as the source of water, and set himself to doing something about it.

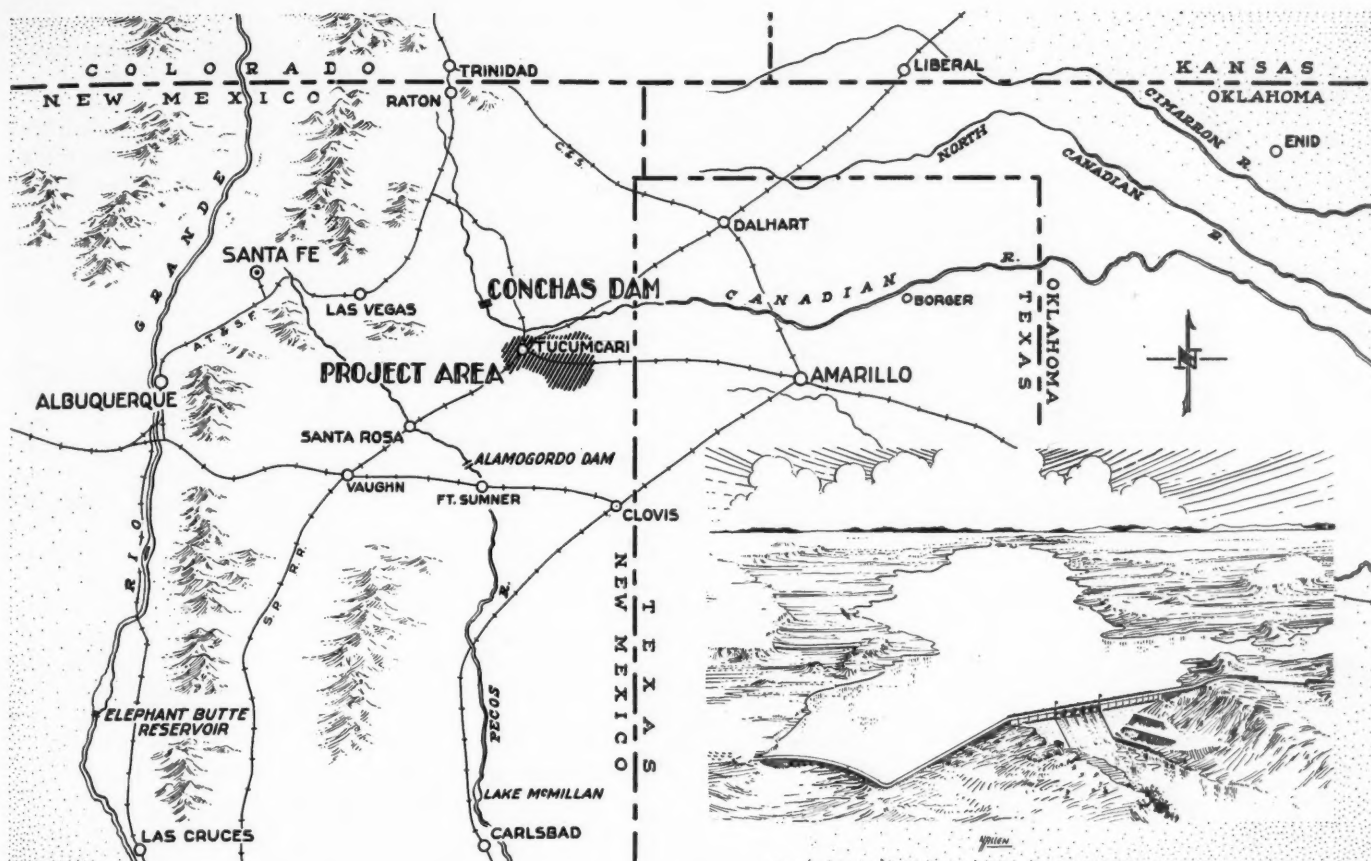
"Preposterous! Ridiculous! Impractical!"

These were the condemnations the proposal met from engineers. Experts pointed out that the Canadian river flows through a badlands region of mountains. It is an area as devoid of vegetation as it is of inhabitants. The water would have to travel through a canal 38 miles long. The proper grades could not be maintained. The rough country presented engineering problems it would be impossible to solve.

The cost would be prohibitive, they insisted. But Arch Hurley took all this in his stride. He refused to be swayed from his conviction that the project was feasible. He recruited the moral and financial support of his community. He went to Washington. He buttonholed congress-



Spillway of Conchas dam. Photo by U. S. Army Engineers.



men and senators. He cooled his heels in official ante rooms for hours on end. He haunted the state capitol at Santa Fe. He enlisted the aid of every man, woman and child whom he thought could help in the slightest.

That old report of Freedland's, made in 1912, was exhumed from the archives and a state survey was ordered in 1925. State Engineer H. W. Yoo completed this survey in 1929 and proved the practicability of the irrigation project, and Yoo's report became the starting point for a campaign which has transformed the old settler's dreams into a reality.

Hurley, armed with the survey and report, resumed his trips to Washington. He became acquainted with Big Bill Thompson, then mayor of Chicago, who was interested in Mississippi river development. Big Bill and Hurley became fast friends, although their goals were different. Frequently they clashed, but Hurley profited from his association with Thompson. He learned the technique of lobbying, and when the Mississippi valley was devastated by floods, Hurley made the most of the opportunity.

At that time "Fighting Jack" Dempsey was New Mexico's only representative in Congress. With the aid of Dempsey Hurley presented a mass of statistics citing the extensive damage caused each year to private and railroad properties in New Mexico, Texas and Oklahoma by Canadian river floods. He talked flood control, and declared the cost of the proposed Conchas

dam would be repaid in five years by the elimination of property damage.

All of this fitted in with the New Deal program and in 1935, the Conchas dam and reservoir project was ordered as part of the works relief program. Financed entirely by the federal government, and placed under the supervision of the war department, it was originally a flood control project only. But Hurley, after cannily biding his time until there was no danger of imperiling the project, brought up the irrigation angle again.

More surveys followed, and it was found that an adequate irrigation project would cost \$8,155,000. Reclamation bureau engineers declared that the land which would benefit could not be expected to pay back more than \$5,655,000 of this on a repayment plan spread over 40 years. Therefore they did not consider the project practical under such circumstances.

But Hurley, Congressman Dempsey and Senator Carl Hatch and Senator Dennis Chavez had other ideas.

"We'll get a PWA grant," they decided and off they went to Washington again.

That was in the days when PWA grants were being passed out freely, and they encountered few obstacles. President Roosevelt authorized a grant of \$2,500,000; the Arch Hurley Conservancy district was formed and immediately signed a contract with the Bureau of Reclamation. The first irrigation project in the history of the nation to be even partially subsidized by the government became an actuality.

The Conchas dam project was assigned to the Corps of Engineers, U. S. Army, on August 1, 1935, with Captain Hans Kramer, who is now directing construction at the Panama canal, in charge of the dam-site.

Captain Kramer announced the dam would be completed in four years. On September 16, 1939 the dam was complete and in full operation. It had been intended to have Secretary of War Harry H. Woodring dedicate the project October 10, but due to the war crisis, all ceremonies were cancelled.

Conchas dam with its auxiliary structures is six miles long. It is in the southeast corner of the famous Bell ranch, one of the last of the great holdings of the Old West. Eventually the area will become a state park. Its 28 mile lake is already stocked with fish and it will be opened to the public sometime this year.

While only 25 miles from Tucumcari in an air line, there is no road connecting the dam with that city. However, it is expected that a right-of-way will be obtained from the Bell ranch in the near future and a state highway constructed from Tucumcari to Las Vegas via Conchas dam. The damsite is reached from Newkirk, on U. S. Highway 66, over a 25-mile government built road.

The dam has a height of 235 feet, is constructed of concrete, and besides serving to control the flood waters of the Canadian and to furnish water for irriga-



tion, is equipped with penstocks for the generation of electric power.

The outlet portal of the irrigation headworks will discharge water in the Conchas canal. Harold W. Mutch is Reclamation Bureau engineer in charge of canal construction.

This main ditch is 69 miles long, and the first 38 miles of it traverses the badlands area of the Bell ranch, a barren land of steep and precipitous bluffs and mountains, arroyos deeply gouged by wildly racing flood waters. This terrain has made the construction task far from easy.

The canal cuts through an area populated mainly by jackrabbits and rattlesnakes. It requires the construction of 32 siphons to lift the water over the deep washes. Five tunnels pierce mountains for a total distance of 6.2 miles. At Tucumcari the irrigation system spreads out into a network of minor canals and distributing ditches.

The Arch Hurley Conservancy district, which will receive the benefit of this water, practically surrounds the city of Tucumcari, and part of it is within the city limits. The bulk of the district lies to the south and east of the city, stretching to the base of barren Tucumcari mountain.

Plans for the disposal of the land to be available for bona fide settlers, are explained by Engineer Mutch. He said:

"Land speculation, which always has an unfavorable reaction, will be curbed. The government, in drawing up its irrigation contracts with present land owners, has safeguarded against pyramiding prices.

"Individual holdings are limited by the contracts, and consequently there will be from 20,000 to 25,000 acres which must be sold. Since the Bureau of Reclamation has made a fair appraisal of this land, purchasers will be assured of getting it at a fair price and with an insured future.

"The official appraisal ranges from \$4 an acre for land far removed from the canals to \$30 an acre for that situated close to the main ditches. The mean appraisal is \$10.51 per acre.

"Under the terms of the contracts signed

Lonely sentinel of the plain is Tucumcari mountain, which rises 1000 feet above the valley in the center of the area to be irrigated. Photo taken from Mesa Rica through which a tunnel will carry the irrigation water.

by present owners, a single man can not own more than 160 acres. A married man is permitted 320 acres.

"The contract provides that after January 1, 1941, the secretary of the interior will ask present owners of the land to designate the 160 or 320 acres they intend to retain as their own. The secretary will then name a time within which to dispose of surplus acreage.

"Of course some land will be sold for more than the appraisal price, but the government steps in to save some of that money for the man who actually is going to work the land.

"It is provided in these contracts that one-half of that part of the purchase price which is in excess of the appraisal value shall be turned over to the government and applied to repayments charged against that particular land.

"In other words, if Rancher Smith sells 160 acres to Farmer Brown for \$10 an acre higher than the appraisal value, Farmer Brown actually gets back \$5 an acre. For Rancher Smith will be allowed to keep only \$5 of that excess \$10 an acre. The other \$5 an acre is applied to irrigation repayments on the land sold, in the inverse order of due dates.

"The payment plan for the reimbursable portion of the irrigation project's cost has been spread over a period of 40 years, with annual payments without interest."

Actual work on the irrigation project was begun October 15, 1938, when a force of 60 surveyors began laying out the route of the main canal and ditches, which will have a total length of 100 miles.

It was estimated the project could be completed in three years, with six years the maximum, but it received a temporary setback in the summer of 1939. Through a misunderstanding, the \$2,500,000 PWA grant was withdrawn, on the grounds the construction work had not been started.

But Arch Hurley got busy, and quickly the word came back from Washington that it was "all a mistake" and the project got its \$2,500,000 back again.

Gangs of construction men are toiling day and night in those Bell ranch badlands. They have drilled one tunnel through a mesa. They are halfway through with the second tunnel, 7,000 feet long and 500 feet beneath the mesa top, and they have started construction of a third.

Huge machines are biting into the earth. Miles of earth-banked ditch sprawl across the desert, twisting and turning, 40 feet deep in places.

While there undoubtedly will be some truck farming in this region as a result of the irrigation project, the bulk of the crops is expected to continue to be grain and forage sorghums. D. R. Burnham, in charge of the Department of Agriculture experimental station at Tucumcari, believes they will be milo, dwarf hegari and kafir, principally. He looks for a considerable increase in production per acre, estimating that where crops have run 20 to 30 bushels per acre in dry farming methods of the present, they will be double, and perhaps triple that on well-irrigated land. A small acreage of cotton always has been grown here, and there is expected to be appreciably larger yield per acre in this crop.

Alfalfa, too, should be a profitable crop, Burnham points out. Alfalfa would be new to this country, and assured of a ready market because of the fact Tucumcari is the center of a large cattle producing area.

But that is still tomorrow. Today the construction work is forging ahead. Something like 25,000 acres of land will be available to new settlers . . . and Arch Hurley has won his quarter of a century struggle to make green grass grow on this desert.



Landscape view of the quartz crystal field at the base of the Superstition mountains.

Crystals in the Shadow of the Superstitions

Countless prospectors have combed the rugged Superstition mountains in Arizona in quest of the legendary "Lost Dutchman" gold mine. They never found the gold. But if they had been interested, they could have brought home some very nice quartz crystals. There is a great field of them near the base of the mountain—and here is John Hilton's story of a field trip into that region.

By JOHN W. HILTON

Photographs by Harlow Jones

"**T**HERE are many versions of the 'Lost Dutchman' mine legend," remarked Ed Matteson as we sat around his hospitable fireplace in Phoenix. We were discussing plans for a trip the following day into the region of the Superstition mountains, and it was only natural the conversation should turn to the fabulous lost gold mine said to be hidden somewhere in the Superstition range.

There were four members in our party

—three mineralogists and a photographer. Harlow Jones was looking forward to the opportunity of securing new prints for his fine collection of desert pictures. Our itinerary included old ghost towns, active mining camps, canyons where ancient Indians had inscribed their strange symbols, great forests of saguaro cacti—and the Superstition range itself.

Ed Matteson was to be our guide. He had been over the area many times; nevertheless I believe he was looking for-

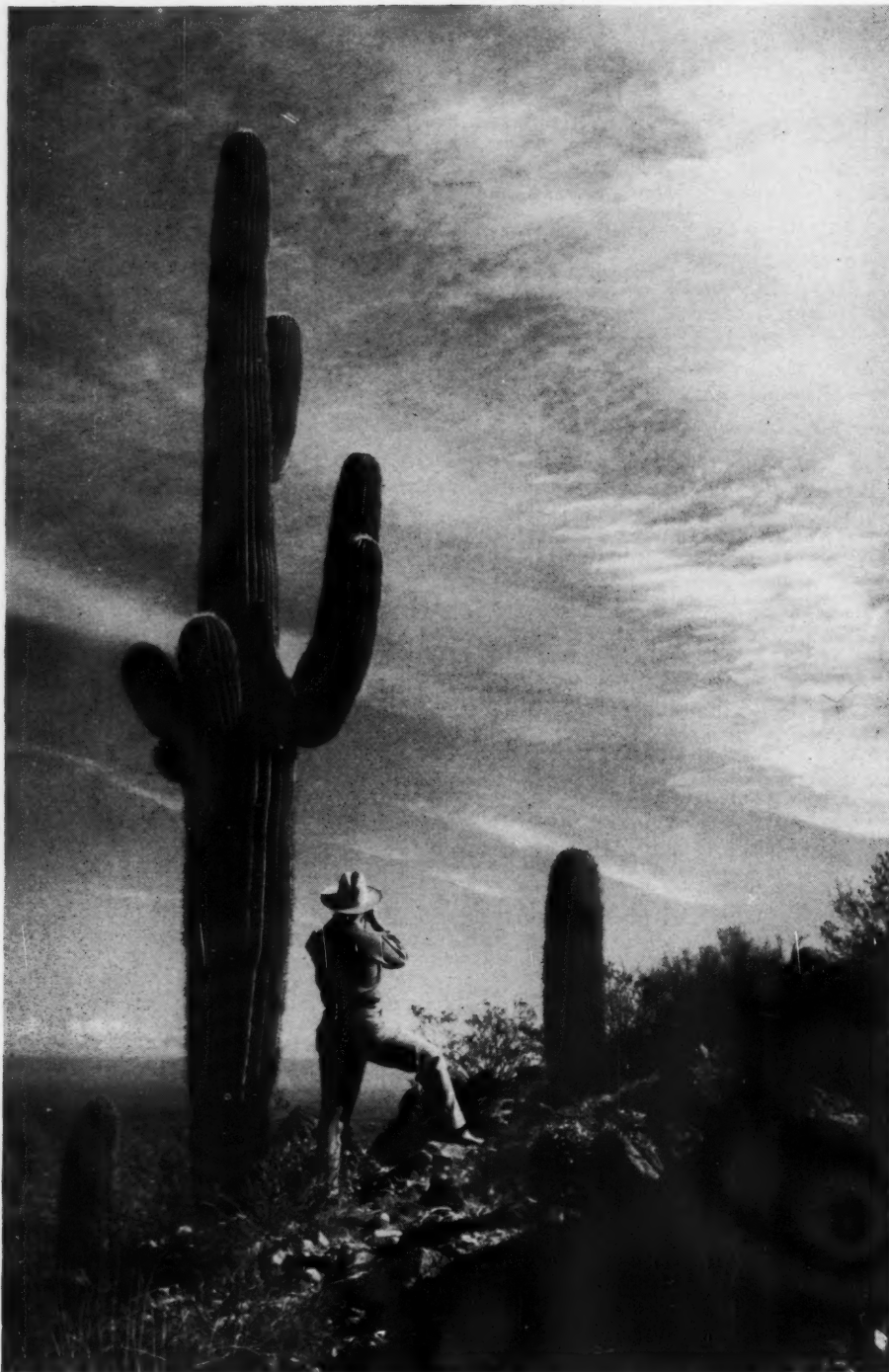
ward to the outing with no less eagerness than we who were to explore it for the first time. The desert is that way. One never sees enough of any one place. The second and third trips are usually more interesting than the first.

Max Felker was one of the party—and it was a sort of reunion for Max and me. Since our high school days we had trudged the desert hills together, mostly in Death Valley and the Mojave desert. Then I moved to Coachella valley and Max went into the diamond tool business in a backyard laboratory where he and I as youngsters had spent many happy days cutting rocks and assaying ores. This was our first field trip together for 12 years.

Felker's diamond tool business has progressed to the stage when he has more leisure time for such trips as this. As we sat there by the fireplace in Matteson's home, it was evident Max was thoroughly enjoying the opportunity to get away from the pressure and worry of vital defense orders which are crowding his factory.

For the moment the "Lost Dutchman" seemed more important than re-armament and the war in Europe. We talked of Jacob Walz, the German from whom the lost mine derived its name, and of the many strange angles to his story.

One version that interested me especially was a story told to Ed Matteson by an old settler in Arizona. It is just as plausi-



Giant saguaros dot the field where Hilton's party found specimens of quartz crystal.

ble a yarn as many others that have been told of the "Lost Dutchman."

According to Ed's informant, Walz was not a miner at all. The old-timer claimed to have known the German personally, and to have positive knowledge that Walz was merely a "fence" for a gang of high-graders who were stealing rich ore from mines being worked in Arizona at that time.

It was only natural that Walz and his fellow-conspirators should select the Superstition mountains for their operations. Every old-timer in the Southwest has heard tales of the lost "Mina Sombrera" which Don Miguel Peralta was reported to have discovered in the Superstitions.

What would be more logical then than for Jacob Walz and his accomplices to carry on their criminal operations under the guise of having relocated the old Peralta workings?

The Superstition range with its deep canyons and precipitous cliffs and hidden recesses is a perfect hide-out for law-breakers. Many men are reported to have gone into this rugged country in quest of the old Peralta mine, and later in search of Walz workings, and never returned. It is said that Walz himself, on his deathbed, confessed to the killing of three Mexicans who invaded his domain.

Whether or not there is any truth in this

there is definite record of a more recent version of the "Lost Dutchman" mine, attempt to use the old mine as a smoke-screen for illegal traffic in gold.

This tale is about a prospector who announced that he was going into the Superstitions to search for the "Lost Dutchman." When he failed to return on schedule, searching parties were sent out. One night the lost man stumbled into their camp tattered and apparently near exhaustion. He had cut off one sleeve of his heavy shirt and tied one end to form a crude sack. In this was an astounding collection of large gold nuggets.

Immediately there was a flurry of excitement. It appeared to be the biggest gold strike of the decade. Of course the gold was sent off to the mint—and then the bubble broke. The mint assayed the metal and notified the "lost prospector" and his associates that it was too pure for native gold—it was dental gold. The experts in the federal assay office had no difficulty detecting the true character of the metal. They paid for it, but at the rate for old gold instead of newly mined metal—and quietly warned the "miners" to be more accurate in classifying their nuggets in the future. Needless to say, the gold rush never developed, and the "prospector" dropped from sight.

Harlow and Max and Ed and I decided to leave the "Lost Dutchman" for others. We would be satisfied if we could find some nice quartz crystals which Matteson told us were to be found near the Superstitions.

The sky was overcast when we left Phoenix the next morning. Harlow was looking glum. It is hard to take good pictures in the rain. But by the time we reached Apache junction the clouds were breaking, as they often do on the desert without dispersing a drop of moisture.

Great patches of sunlight spotlighted the floor of the desert, and as the billowy clouds sailed overhead they were trailed on the ground by monster blue shadows of ever-changing patterns. It became a perfect day for photographs and I wished I had brought along my sketching outfit.

We stopped at Apache junction and saw the zoo and other attractions, including an impressive monument erected by the Dons of Phoenix to the memory of the "Dutchman." This monument with its bronze prospector and burro mounted on a pedestal of native rock is a conspicuous landmark and creates much interest on the part of Arizona visitors.

We took the road to Roosevelt dam, but had gone only a few miles when we reached an area where Ed Matteson had camped and seen quartz crystals scattered over the floor of the desert. We took a side road and soon were finding small crystals and fragments of quartz scattered about. We thought they may have come from the range ahead and we followed the road as



Ed Matteson (right) and Max Felker examine chips of agate and flint evidently left here by an ancient Indian tribesman.

far as we could, only to find that we had moved entirely out of the quartz area.

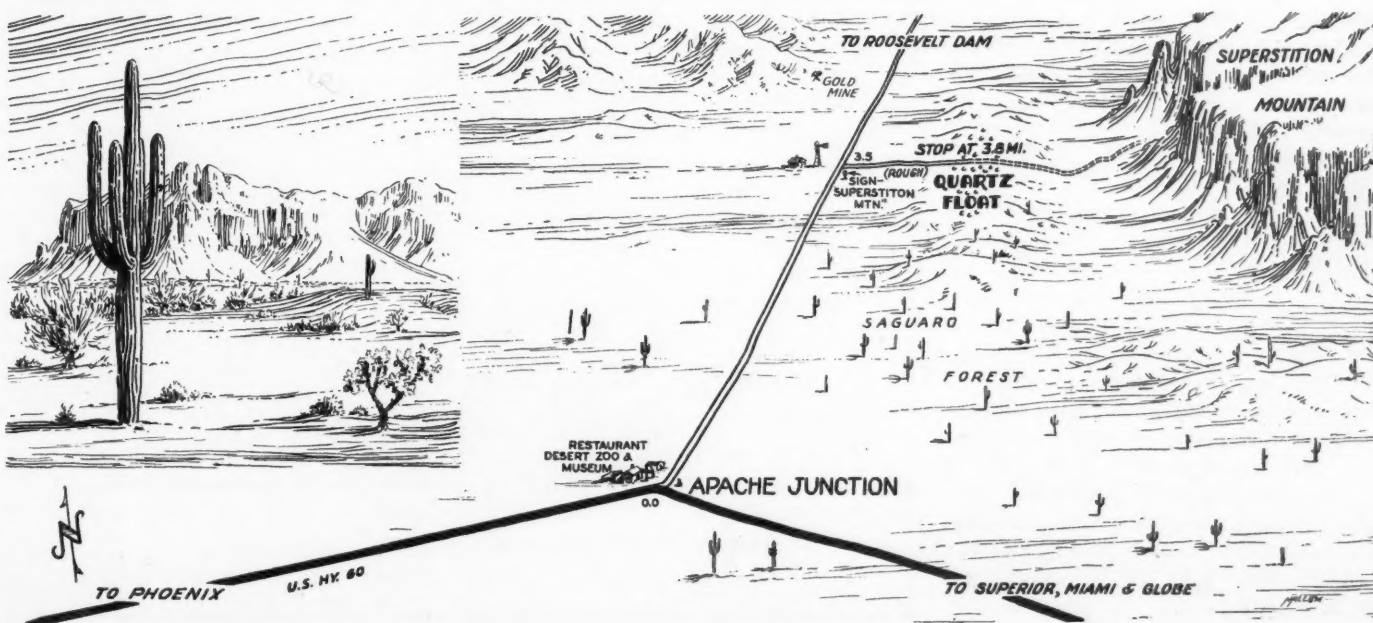
We returned again to our original field. The clouds were smaller now, and traveling faster. Their shadows passing over the rugged massif of Superstition mountains created striking effects. One minute a single pinnacle would stand out in bright sunlight against an embattlement of dark blue. Then the picture would change, and the sun's spotlight would turn some brooding cliff into a mass of burnished gold.

With our field glasses we could see caves that invited exploration. At a distance they appeared small, but when we compared them with the giant saguaro that grew near them, it was evident they really were very large.



Close-up of the flint chips which led members of the party to believe they had discovered a prehistoric Indian workshop.

Scouting over the quartz crystal field, we learned that the area of the crystal float lay parallel to the mountain range, rather than toward it. We spread out to determine the extent of the field, and have in-



MARCH, 1941



Quartz crystals from the Superstition mountain field.

ments. He found a partly finished arrow-head and a complete scraper, lying where a brave had left it. I have no doubt that a systematic search would disclose other relics, since this was once the hunting ground of the Apache Indians.

We found many rock dams in the small washes, and were told by a rancher they were built by the CCC boys as check dams to conserve ground moisture. Some one is always taking the romance out of things—if this rancher had not come along I would have assumed these dams were evidence of placer gold operations.

Like most desert areas, this is one of the places where one can walk and walk, hoping always to find a better specimen over the next ridge or arroyo. We all acquired as many specimens as a rockhound is entitled to carry home from one field—which in the case of quartz crystals is a pocketful.

Driving toward Superior that afternoon our conversation drifted back to the Superstitions—not the legendary gold hidden in its secret places, but other things that the gold-seeker would never have the time or patience to look for.

The gold prospector will scorn mineral specimens that a collector would walk many miles to get. No doubt there are mineral treasures in the Superstitions that would have no value at the United States mint—but that would be a source of pride and joy to the average hobbyist. I would like to return to these mountains—not to find the "Mina Sombreira"—but just to look for the semi-precious gem stones the gold-hunters passed by.

And anyway, no one has yet proved that the Dutchman's mine does not exist. One thing is fairly certain. No matter who enters the Superstitions, or what he is seeking, there will always be in the back of his mind the thought of Peralta and Walz and Adolph Ruth and the other characters who came this way and sought gold, and perhaps found it in this wild mountain region of Arizona.

Sez

Hard Rock Shorty of Death Valley . . .

By LON GARRISON



"Look," said Hard Rock Shorty, "it says here in the paper that right over there across the mountains in Sequoia national park they got a tree that's the biggest in the whole world. Now, mind you, I ain't disputin' that but here three four year ago we could o' had a bigger one right here in Inferno."

He unlaced his shoes, dumped the sand out, wiggled his toes reflectively and then propped his bare feet on the rail of the store porch.

"Pisgah Bill an' me could o' done it—an' would o' if Bill hadn't o' been in such a gol blamed hurry. We'd been out monkeyin' around some o' those little canyons in back o' Ubehebe when we finds a little cave—a Indian burial cave. We was investigatin' when Bill finds a little grass basket with a seed in it. He takes it along, an' then one day down to the shack he gets to lookin' at it.

"Wunner if it'd grow?" he sez.

"Sure it'd grow," I tells 'im.

"This healthful air'd keep anythin' full o' zip an' vitality."

"Well, let's try 'er," suggests Bill. An' we does.

"We dug a little hole in the sand,

drops in the seed, an' I goes back to the shack for a pail o' water. I gets back to the door just in time to see Bill pourin' a cup o' water on the seed. I starts hollerin' to Bill to get out o' there, but too late for that too.

"Yuh see, that seed'd been layin' in that cave for years an' years. First year without water wasn't so bad, but next year it begun to get pretty dry, an' by the time a hundred years passed it was drier n' a tenderfoot on an August day with no canteen.

"So — when that cup o' water come along, it growed quick—just 'Poof!' an' 'Whoosh!' an' there was Bill a hunnerd an' seventeen foot up in the air where the top branch o' the tree snagged 'im as it went by. He kicked around some an' finally busted loose an' come crashin' down through the branches, but it took me three days to get the splinters out o' him.

"But, as I was sayin'—if he'd just o' waited 'til I got there with that bucket o' water—Probly just as well though. I'd o' been hooked instead o' Bill an' I dunno how I'd ever got down. But what a tree that would o' been!"



Stately palms and a tumbling mountain stream provide an ever-changing panorama of natural beauty in Borrego Palm canyon.

There are 200,000 acres of desert and mountain terrain in the Borrego Desert State park of Southern California. For the most part it is a virgin wilderness, accessible only to the seasoned hiker. There is one scenic canyon, however, lined with hundreds of native palm trees, that may be traversed without hardship. A good trail leads part way up Borrego Palm canyon—and here are a few glimpses of the panorama Nature has provided for those who take this trip.

Borrego Desert State Park

By RANDALL HENDERSON

WHEN J. Smeaton Chase crossed the Borrego desert more than 20 years ago, gathering material for his entertaining book, *California Desert Trails*, one of the Borrego homesteaders told him about a palm canyon on the west side of the valley.

"I scanned it with my glasses," Chase wrote in his notes, "but could see no likelihood of water, and so reluctantly passed it by."

It is easy to understand why the author-explorer was not impressed by his distant view of Borrego Palm canyon. Seen from the floor of the desert, there is nothing about this precipitous gash in the San Ysidro mountains to distinguish it from a thousand other desert canyons. There are the same rocks and the same scrubby growth of greasewood, yucca, catsclaw, encelia and burroweed.

The charm of Borrego, like many another scenic retreat in the desert Southwest, is modestly concealed behind towering walls of rock that withhold their secret from the casual visitor.

However, a place of such rare beauty could not always remain hidden from adventuresome Americans. Today a well-graded dirt road leads to the canyon entrance, and from the parking area at the end of the road a rocky foottrail follows the winding course of the streambed a mile and a half to the first of a series of picturesque palm oases. These palms are not visible from the bajada where the road ends—and that explains why J. Smeaton Chase passed without exploring this canyon.

My first visit to this secluded canyon in the San Ysidro range was many years ago—before the roads into Borrego valley were as smooth as they are today. As I stopped my car among the rocks at the mouth of the canyon, another motorist who had driven in just ahead of me opened the door of his automobile, introduced himself and asked me if I was planning to hike up the trail.

"I would like to accompany you," he said.

"I am interested in snails, and I want to see what species I can find in this area."

Evidently he read what was passing in my mind, for he hastened to reassure me. "Yes, there are snails here. I am sure of it. They are found in many of the desert mountains."

And so we took the trail up Borrego Palm canyon. I was skeptical about those snails, but he told me where to look for

them—and I found many. They were clinging to the rocks in the talus slopes and on the hillsides. Tiny fellows they were, not as big as a pink bean, but very much alive.

My snail-hunting acquaintance explained that when periods of dry weather come they withdraw into their shells, seal up the entrance with a tough papery covering, and remain dormant for months or even years—until moist conditions stimulate them to activity again.

My companion soon detoured up the side of a mountain, and I continued along the trail. I was more interested in palms than in snails that day.

I followed the trail around two bends in the canyon and then an oasis of stately *Washingtonias* suddenly loomed up ahead of me. It is always a thrill to come upon these trees in the arid desert. They tower high above all the surrounding plant life—dignified and green and refreshing. In a land where water is a rare luxury, they will live only where the soil at their roots is saturated with moisture.

That first palm group in Borrego canyon is a popular retreat for picnic parties. Visitors pack their sandwiches along the mile and a half trail just for the privilege of eating lunch among the boulders and palm fronds beside the crystal-clear pool that lies at the foot of a miniature waterfall.

The palms and the boulders form a sheltered cove here. Indians camped in this spot in prehistoric days. The morteros

where they ground their mesquite beans are in the rocks not far away.

This oasis with its waterfall and pool is just a sort of prelude to the scenic vista that extends for miles along the stream back into the San Ysidros.

The trail to the waterfall is easy to follow, but beyond that it fades out and the hiker may follow the route of his choosing, scrambling over boulders, detouring precipitous rock jams, threading his way through dense shrubbery that grows in many places in the bottom of the gorge.

My most recent trip to Borrego canyon was New Years day, 1941. I went there to count the palm trees.

And if you ask me why I wanted to count palms in a canyon where they grow for miles along a crooked boulder-strewn watercourse, I can offer no plausible reason.

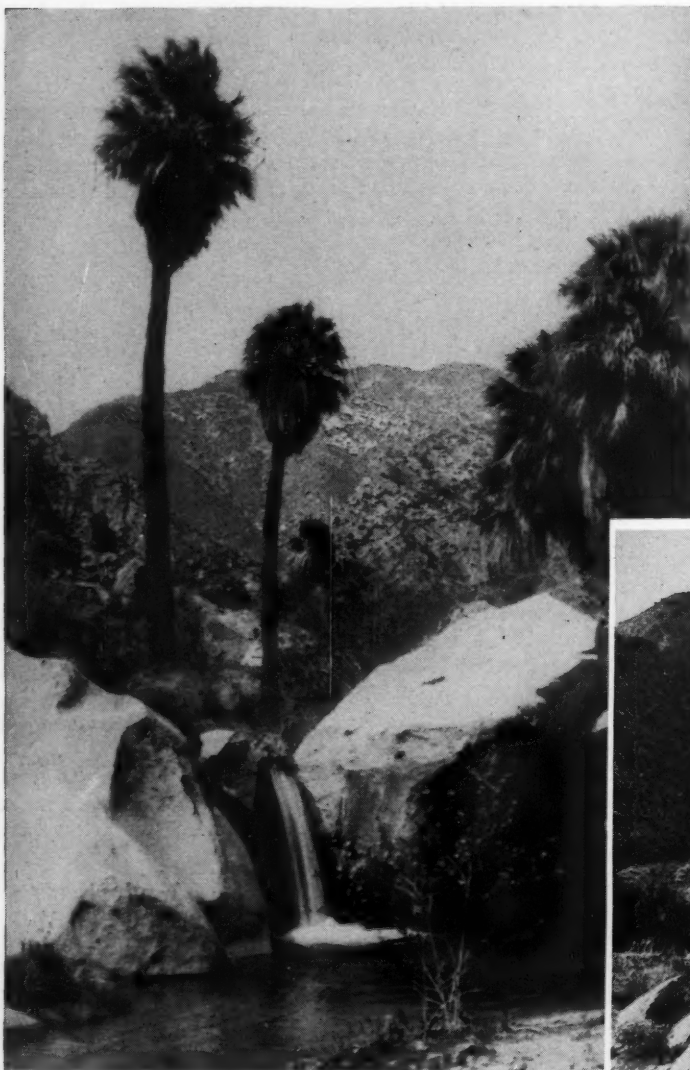
It merely is one of those hobbies that practical minded folks never quite understand. Many years ago I started a scrapbook in which are pictures and all the data I have been able to obtain regarding each of the palm oases on the Colorado desert.

It was a bigger task than I anticipated—and the book is still far from complete. When my self-assigned job is finished, perhaps the book will mean nothing to anyone except Randall Henderson. But for me it will recall the memories of hundreds of interesting trips into the odd corners of the desert—of many days of fruitless search for a waterhole casually mentioned in conversation by a prospector friend, of weary pilgrimages through deep sand, and long treks in the heat of summer with a canteen nearly empty.

It was tough going at times, but who ever regrets such experiences. Especially, when on the other side of the balance sheet I can relive in memory the thrill of discovery, the coming unexpectedly on a little palm oasis that I never knew existed, the exhilaration of a drink of cool spring water after miles of thirst, the hours spent in idling among the boulders of an old Indian campsite trying to visualize the picture that was there a hundred or 500 years ago.

Anyway, I went there New Years day to count the palms. That information properly belongs to my scrapbook. It is gratifying to check back after a few years and find that the palms are increasing, as they are in all the oases where the water supply is plentiful.

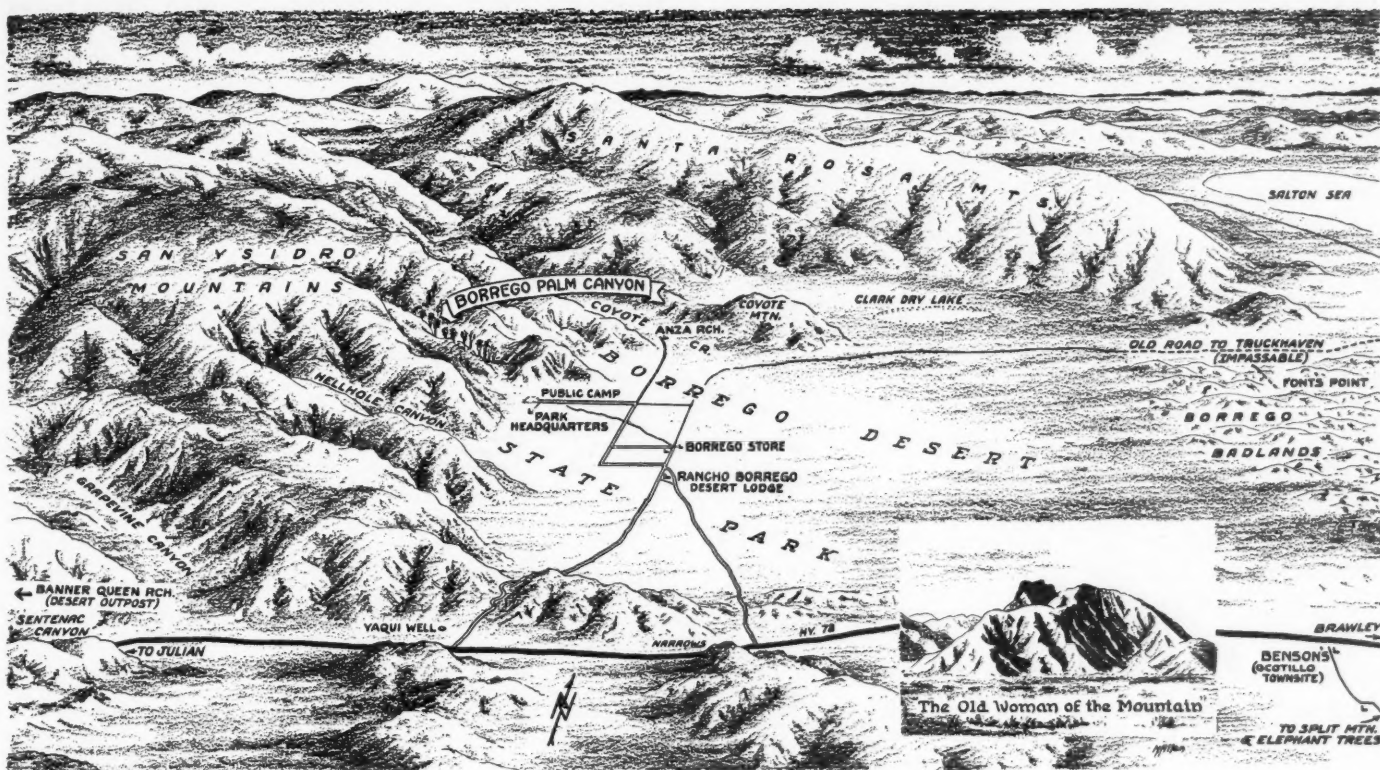
I spent New Years eve with Ruth and Noel Crickmer, by the fireplace in the peaceful atmosphere of their friendly Rancho Borrego lodge. The distant world was engaged in the hilarious



This picture of the falls was taken many years ago by Clinton G. Abbott. Today this waterfall and pool are surrounded by a jungle of palm trees. It is a favorite retreat for picnickers.



One of the picnic ramadas constructed by the park service in the campground at the entrance to Borrego canyon. San Ysidro range in the background. Photograph by Chas. F. Webber.



pastime of bidding farewell to the old year. We tuned in snatches of it on the radio.

But the arrival of another year means nothing to a desert that counts its age in thousands of centuries—and so we just went along with the desert and were sound asleep long before 1941 arrived.

Many roads lead across the floor of Borrego valley to the parking place at the mouth of Palm canyon. But the place has a landmark that is visible for miles — and is an accurate guide for those in doubt as to which road to take.

On the San Ysidro skyline directly above the canyon entrance, is the silhouette of "the old woman of the mountains." She lies on her back, her rugged profile and full bosom toward the skies. Sometimes the figure is called "the old man of the mountains." Since there seems to be a disagreement as to the sex, the Crickmers have compromised by referring to their rock-featured neighbor as "old-rain-in-the-face." You can take your choice, but anyway the canyon entrance is directly beneath the crown of the head—to the south.

The morning sun was just coming over the distant Chocolate range as I parked my car on the Borrego canyon bajada that New Year morning. It was a 30-minute hike up the trail to the waterfall. There are 118 palms in that first group, counting only those trees more than six feet in height. Many young palms are growing along the stream, and under the protection of the California state park commission they probably will increase rapidly.

Directly above the falls the floor of canyon is choked with huge boulders. The route is easily passable, however. Along the first half mile above the waterfall I passed only two grown palms. Then I came to the most colorful section of the entire canyon. It properly could be called Rainbow gorge. The canyon walls close in and the stream tumbles over a rocky cataract of vari-colored schist rock. The strata occur in a hundred shades, ranging from creamy white through ochre and orange to dark brown, with layers of green and black. The artist and the kodachrome fan will want to spend the rest of the day right here. There are many palms along this sector of the canyon, some of them appearing to have their roots in solid rock. I counted 215 trees in this bright-hued sector.

The upper canyon twists and turns, and it is never possible

to see more than a quarter of a mile ahead. The palms are very clannish. They occur in groups with gaps of several hundred yards between each oasis. I counted six well-defined groupings.

Four miles from the entrance, the canyon divides, the main stream of water coming down the right fork.

At the fork, the elevation is perhaps 2500 feet, and juniper trees and the other shrubs of the upper Sonoran zone are growing here. The palm trees had become less plentiful and I counted only one *Washingtonia* in the right fork of the canyon. After following it for some distance I climbed the ridge on the left and dropped down into the left fork where 18 more trees were added to my count.

Thanks to the interest and funds supplied by a little group of public-minded men and women in the city of San Diego many years ago, approximately 200,000 acres of land in the Borrego desert area have been set aside as a state park—and Borrego Palm canyon is assured for all future time against both wanton destruction and private exploitation.

John W. Calvert, ranger in the service of the California park commission, is on duty as custodian during the winter months. The park headquarters is at the entrance to Borrego Palm canyon. Excellent camp grounds have been provided for the public at the end of the road, with ovens and ramadas constructed by CCC boys with native rock.

There are many other palm canyons in Borrego state park, but the palms in the gorge marked by the sleeping figure of "old-rain-in-the-face" are more accessible than any of the others.

Borrego desert has become famous for its wildflowers in seasons when the rain god has been generous with his moisture. This year the winter rains have been heavier than usual—and there is promise that March and April will bring the most colorful display of ocotillo, verbenas, evening primrose, desert lily and scores of other species, in many years.

Yes, I counted all the palms—there are 778 of them. And now that they have been counted, you can make your long-planned trip to this delightful canyon and enjoy its fragrance and beauty unperturbed by any worry as to whether or not they have been properly mapped and recorded in my private scrapbook.



Paul Lauritz

As a small boy in his native Norway, Paul Lauritz was unable to buy artist's colors at the village store—and so he started grinding his own pigments. He's been doing it ever since—and has perfected his processes to the point where they are being used by artists everywhere. He has won many awards for his marines and snow pictures—but more than anything else, he prefers to sketch the dunes of the desert.

Artist Who Grinds His Own Pigments

By JOHN W. HILTON

*I*T was National Art Week—and Paul Lauritz preferred to spend it on the desert where he could find the subjects he likes best to paint. He invited me to accompany him to Palm canyon.

I took along my canvas and oils, but to be quite frank, I spent less time at my own easel than in watching the sure intense manner in which he was placing color on his canvas.

Paul Lauritz can handle paint. Every inch of each finished painting is vibrant with color. His work is never flat or coarse. Perhaps his skill with color is due in part to the study he has made of the pigments themselves. For he has always made his own paint—and now furnishes oils for artists all over the country.

His interest in the making of artist's paint began in Norway where he was born 51 years ago. Lauritz says he cannot tell the exact date when his artist's career was started. It seems to him now that it goes back farther than memory itself. As a boy he was doing sketches that were the admiration of his friends and neighbors. His home was near a lighthouse on a rocky promontory, and most of his early work was of the seas and shipping.

Tube oils were not available in the town where he lived, and as he grew older he secured books that would teach him how to grind his own colors. His knowledge was limited and his methods crude, but he finally perfected paints that served passably well.

At 14 he entered the art academy at Oslo. For two years he was allowed to use no color, but he had an intensive course in drawing that has been invaluable to him in later years.

During his vacations he worked in his

father's quarry as a rock driller. Work in stone had a fascination that led him into mining. Eventually he crossed the Atlantic to Canada and secured a job as driller at Nelson. His experiences in the mines gave him a practical knowledge of mineralogy.

At various times he worked in nearly every capacity from driller to promoter—but he never lost interest in his art work. His spare time was spent at his canvas, and in experiments in the making of oil colors.

Finally he went to Portland, Oregon and placed some of his work on display. A hardrock miner who could paint was something out of the ordinary, and his pictures began to sell so readily he gave up mining.

In 1915 he went to Alaska to engage in business with his brother. He continued to paint, however, and later when he returned to the states his snow scenes won widespread attention.

His experiments in the making of color pigment had continued, and his processes had been perfected to the point where others were seeking his materials. A friend offered to finance him in the manufacture of paints for the market. Lauritz took his son into the firm and trained him in the processes he had learned himself. The venture was successful, and today Lauritz paints are used by artists in all parts of the country.

At one time it was thought that only European color-makers could produce pigments fine enough for really good work. Lauritz has proved that here in America paint can be made that is superior in many respects to the foreign product.

For his oil he uses California cold-pressed walnut oil. It has almost the same te-

nacity as linseed, without the tendency to darken with age. Poppy oil has been widely used by European makers, and while it holds its color tone indefinitely, it lacks the adhesive qualities of walnut. Most of his colors are pure pigments, the same as have always been most popular with the masters.

Lauritz moved to Los Angeles in 1919, and in 1920 made his first trip to the desert. He was attracted immediately by the beauty of the sand, so like the Alaskan snows in some respects, and so different in others. The dunes and the ever changing lights on the desert were a challenge to the artist and he came back again and again to observe and to paint. Today his dune paintings are no less popular than his snow scenes in former years.

As he has grown older he has devoted himself more to quality than to quantity. In his youth he would turn out the canvases for an entire show within a few months—and now he will devote the same period to a single painting. His finished work finds a ready market. I wanted to reproduce one of his desert paintings for *Desert Magazine* readers—and found his studio almost bare.

Today, Lauritz with a high reputation for marines, snow scenes, and in fact all types of landscapes, prefers to steal away to the desert. The diversity of subjects in this arid land, he says, is so great that an artist could spend a lifetime in the dunes and canyons and mesas, and never repeat himself. His son has now taken over the responsibility for the manufacture and distribution of his colors, and Paul Lauritz for the first time in his life has the leisure to paint when and what he pleases. Which means perhaps that we will see him on the desert more frequently in the future.

Goat Herder

By HARRY DACQUET
Gardena, California

This photograph of Ed Gonzales, goat herder on the desert near Mojave, California, was awarded first prize in Desert Magazine's monthly photographic contest. It was taken with a 3 1/4 x 4 1/4 Graflex, Ortho-X-film, Zeiss lens, 1/50 at f8, no filter.



Joshua Trees at Walker Pass

By L. A. POWELL
Oakland, California

Second prize winner in the February contest was taken at Walker Pass, south of Owens Peak, California, with a Korona View 4x5, Turner Reich 7 1/2", S. S. Plenachrome Pyro, Defender Velour glossy. Amidol.

Special Merit

Considered by the judges to have more than ordinary merit were the following photographs:

"Joshua Tree at Sunrise," by Russell Smith, San Pedro, California.

"Roadrunner," by Dal Woodhouse, Indio, California.

"Dune Shadow," by Wm. A. Oberlin, Ventura, California.



Life Begins for a Desert Tortoise

Text and photographs by
L. P. LESCARBEAU, JR.

1—Typical nest of Desert Tortoise eggs. The female digs a hole about eight inches deep. She lays from seven to nine eggs, about the size and color of bantam eggs but almost round. Then she covers the eggs with sand, packing it with her hind feet. The eggs are left on their own, to be hatched by the warm summer sun. The tortoises breed and the eggs are laid in the early spring and are hatched in the fall.

2—One baby tortoise is emerging from his shell and another is cracking the eggshell. The baby tortoise is a sturdy little fellow and easily tunnels through his sand covering to the surface.

3—Three of the babies are completely out of their shells, and the fourth is cracking through. Two of the seven eggs in this nest were not fertile.





4—Mother Tortoise comes around to inspect her new family.

5—Closeup of a Tortoise with the eggshell still clinging to his own shell. Note the sand that has clung to his damp body. His head is drawn into his neck skin for protection. The protection of his head by withdrawal into the shell is one of his inherited instincts.

6—This two-day-old youngster is ready to go out foraging for food. Grass and other tender vegetation will soon take the wrinkles out of his loose skin.

7—This picture shows the comparison in size between young Tortoise and his mother. The mother is about 14 inches long. She is eating melon rind, unconcerned about the youngster on her back.

8—An adult Tortoise eats lettuce from the hand of the author's wife.

At the first sign of bad weather, the Desert Tortoise digs into the sand to hibernate for the winter. About a week of sunshine in the spring will bring them out for normal life above ground, although they will not feed for two or three days. They return to their holes every evening and also during the hottest part of the day, being unable to endure the direct rays of the sun for an extended period. They are active in the morning and evening looking for food.

The natural food of the Desert Tortoise is sagebrush and cactus. They will bite down on the thorns without batting an eye. In captivity they will eat any vegetation and are especially fond of melon rinds, bananas, grapes and lettuce. Occasionally they will take a drink of water although they may live without it on the desert.





This picture of a homestead between Boulder dam and Kingman, Arizona taken by U. S. Reclamation Bureau photographer.

DESERT WINDS

BY LESLIE RODGER
Old Forge, New York

All through the night the soft winds blow,
Whence are they from, where do they go?
Drifting far o'er burning sand,
Cooling now the parched land.
Scattered dunes, where wildflowers creep,
Blossoms closed, and fast asleep.

Mantling darkness hides away
All the brightness of the day;
Shadows drift among the sage,
Whispering now of time and age.
Nature gives no sighs nor tears
For the slowly passing years.

Glimmering stars that shine on high,
Far within the arching sky,
Shed your soft and pensive light,
Fill with peace the silent night.
Only you can surely know
Where the night winds drift, and go.

STRANGE ALCHEMY

BY MILDRED GOFF
San Diego, California

A piece of glass fell on the desert sand,
Unlovely and uncolored. Cast away
As worthless, in the desert waste it lay
Where it was flung by some uncaring hand.
The burning sun poured fiery streams of light
Upon the glass, and it began to show
Along its edge a faintly purple glow
That every day became more fixed and bright.

Now after years of wind and sun and rain
The glass shines like a jewel, set apart
And treasured for its colors, that attain
The purple beauty of the desert's heart.
The blazing sun has worked strange alchemy.
So may the fires of life transfigure me.

WIND ACROSS THE SAGE

BY LOUISA SPRENGER AMES
Mecca, California

The wind is strong across the sage tonight,
But sage and I have felt the wind before,
And we have grown more sturdy with its force,
So this, tonight, is one adventure more.

It whips the very stardust through the plumes
To make it still more lovely in the light;
And dawn will find my heart a cleaner place
Because I stand against the wind tonight.

Homestead

BY GRACE P. HARMON
Los Angeles, California

To feel the desert air touch light,
So light,—
To see the moonbeams glow all night
So white,—
To hear the call of bird from mate
To mate,—
Where miles are far too long for hate
To hate;
To revel in the freedom of the range,
Know cool night follows heat without
a change,
Where shel't'ring skies reach down each
friendly star—
Is Paradise!
And that is where you are!

DESERT CHURCH

BY JANE ELLIS
Monrovia, California

My church is not walled with brick and pane;
My church was not built with hammer and
plane.

It is old as old as the sands are old.
Where moonlight pours an aisle of gold,
And makes of my rocky shrine a thing
Of holy beauty, my hymn I sing,
And my voice is a joyful paean of praise,
And the rocks and the stars and all wild-things
raise

Their voices too. When I pray,
White yucca candles light my way,
To a mescal cross, and as I kneel
His living, loving Heart I feel.
While flaming cups scatter incense for me.
Strange waxy blooms chant the litany,
All around in the windless air,
Flutter the soft wings of my prayer.
Strength and courage in me soar,
And beauty when I kneel before
My altar that is moon-poured gold,
In my little church that is desert-old.

CREED OF THE DESERT

BY JUNE LE MERT PAXTON
Yucca Valley, California

Nature locks her shadowy canyons,
And hides, quite safe, the key;
And only a few will have the courage
To solve the mystery.

STILL DREAMIN'

BY ORLANDO H. WEIGHT
Pasadena, California

Desert winds were softly sighing
Where old Desert Pete was lying.
Kneeling by his sand dune bed
I caught the whispered words he said:

"So long Jim. Now don't be grievin'
'Cause the old prospector's leavin'
For there comes a time, you know,
When even desert rats must go.

Huntin' gold or out a larkin'
In tight spots with six guns barkin',
You have always been my friend,
True blue right up to the end.

Here's a little I'm requestin'
'Bout the place where I'll be restin'.
I'm not makin' any will.
Didn't find old Peg-leg's hill.

Place me where I been a prowlin'
Where I'll hear coyotes howlin'
And the wind and lightnin' rave.
Put this writin' on my grave:

'Here, where desert stars are gleamin',
Lies old Desert Pete, still dreamin'
Of them buttes where Peg-leg found
Hunks of gold all scattered 'round.'"

DESERT PROPHECY

BY MILDRED CHARLES
Glendale, Arizona

He who has loved this desert land,
The lonely winds at night,
The sudden yelp of coyotes from
A distant star-swept height,

The amber dawn across the sands,
A juniper that bends
Beneath its load of purple fruit,
Counts wild folk as his friends;

He who has loved its mountain peaks
Against the turquoise sky,
Deep canyon walls, vermilion cliffs
Where languid lizards lie,

Shall find within this desert land,
Supreme in all its plan
The beauty of the ages,
That lifts the heart of man.



Completely surprised and greatly outnumbered, the little band of miners and packers was soon almost wiped out.

Lost Dutchman Mine

With the possible exception of the mysterious Pegleg gold, the "Lost Dutchman" mine in the Superstition mountains of Arizona is the best known and the most persistent of all the treasure legends in the Southwest. There are many versions of the Dutchman's tale of a rich ledge in the Superstitions—and thousands of prospectors, both tenderfeet and veteran desert men, have searched for it at one time or another. John Mitchell's story in this issue of *Desert Magazine* is the most generally accepted version of the Dutchman's fabulous ledge of gold.

By JOHN D. MITCHELL
Illustration by Frank Adams

JACOB WALZ has become one of the legendary figures of the Southwest. Unlike the mountain men who trapped the streams and traded with the Indians during the middle of the 19th century, Walz was a miner.

If we are to believe the tales told about him following his arrival in Phoenix about 1864, his life was a series of episodes of high adventure. He is best known, however, for his asserted connection with the Peralta gold mine, said to be located somewhere in the recesses of the barren

and fantastic Superstition mountains 25 miles east of Phoenix.

Don Miguel Peralta is said to have discovered the rich vein some time in the early '50s while prospecting the rugged Superstitions. Peralta was later joined by his friend Don Francisco Ballesteros of Sonora, Mexico.

Beautiful ornaments fashioned from solid gold found in recent years in the graves of a prehistoric Indian village in Garden valley in the Superstitions, would indicate that the rich ledge was known and worked by an ancient tribe which lived in that part of the country long before the arrival of the Spanish invaders.

Recruiting a crew of miners and packers among the Mexicans and Indians, Peralta and Ballesteros built an arrastre and opened the vein.

The ore was exceedingly rich. It was put in leather bags and packed on the backs of mules to the arrastre where it was ground. As the gold was freed from the quartz it was collected in the form of amalgam which was smelted into bars in a small adobe furnace.

An adobe house with a rock foundation was built along one side of the boulder strewn canyon about one mile below the mine. Near the house and camp a rock corral was built for the mules.

With an abundance of rich ore, and the bars of gold piling higher day by day, we have no reason to believe that the two old friends were unhappy. With the lofty Superstitions towering high above them in the deep blue Arizona sky, it can hardly be denied that they had found a beautiful place in which to live and work. Only one thing threatened their security—the fierce Apaches, whose hand was against everyone.

The ore grew richer and richer as the inclined shaft penetrated deeper and deeper into the mountain side. To avoid the necessity of hoisting the ore up the shaft it was decided to run a tunnel into the mountain from near the canyon. Accordingly the tunnel was started and had reached a distance of about 50 feet when the mine was suddenly attacked by a large number of Apache warriors. Surprised and greatly outnumbered the little band of miners and packers was almost completely wiped out.

Only one man escaped. This Mexican hid in the rocky canyon and then made his way to the arrastre where Peralta, Ballesteros and the two Peralta boys were grinding ore. Taking their rifles and ammunition the five men hurried into the hills from where finally, after enduring many hardships, they made their way back to Sonora.

Some of the ore-laden pack mules were stampeded during the massacre and disappeared in the hills. Years later, two old prospectors, known as "Silverlocks" and "Goldenlocks," found some of the rich ore in a box canyon where it evidently

had fallen from the packs of the straying animals. Knowing nothing of the Peralta mine tragedy, the prospectors assumed the ore came from a ledge in the vicinity where it was found, and dug many holes and trenches in an effort to locate the vein.

Jacob Walz, traveling in Mexico, is said to have heard the story from the survivors of the massacre and to have made his way north to the little frontier town of Florence on the Gila river, arriving there in the early '70s. He outfitted himself and headed his little pack train into the wild Superstitions to search for the Peralta workings, which were said to have been covered up by the Apache Indians after the massacre to prevent them from again falling into the hands of the white man.

A month later Jacob Walz reappeared in Florence looking for some one to make a dry washer or rocker small enough to be packed on the back of a burro. He was directed to another German known only as Frank, who was making his living doing odd jobs of carpenter work around Florence. While the placer machine was being completed Walz told the carpenter he had found some very rich placer gravel near Iron mountain on a branch of Pinto creek and that he was prospecting up-

stream to find the vein from which the gold came.

On his next trip to Florence Walz told Frank he had found the old Peralta workings from which the placer gold had eroded. Walz invited Frank to go with him and help work the mine. Knowing nothing about mining and being afraid of the Apaches, the young carpenter refused to go.

Later Jacob Walz was joined by a nephew named Jacob Weizer. The two men made frequent trips into the Superstitions, always returning with their burros loaded down with rich gold ore which was sold in Phoenix, Tucson and Florence.

Old Frank, who later lived in the Pioneers' Home in Prescott said the location of the much hunted mine did not seem to be much of a secret in those days and that many old timers like himself knew that it was located somewhere on Pinto creek not far from Iron mountain.

Walz was not a naturalized citizen of the United States and for that and other reasons did not have his find recorded. One of the Poston brothers and a man named Myers of Tucson bought some of the ore from Walz and tried to follow him to the mine, losing the trail at Whitlow's

ranch on upper Queen creek on the south side of the Superstitions.

One day when returning to the mine Walz and Weizer saw two men breaking ore on the dump. The men were very dark and were taken to be Apaches. Shooting from behind some large boulders the Germans killed both men. Closer examination revealed that the two men were Mexicans, who evidently had come from Mexico to relocate the mine. The bodies of the dead men were taken to a nearby wash and covered with earth and rocks.

Later Weizer was caught in a flood while attempting to cross the Gila river and after being rescued by Pima Indians died from exposure. The body was buried somewhere on the old J. D. Walker ranch on the Gila river.

Walz, now an old man and left alone, made his last trip to the mine in 1877. After filling his sacks with the fabulously rich ore the old Dutchman covered the entrance to the shaft with timbers and rocks, loaded the sacks on his burros and then headed down the canyon never to return.

Walz sorted out a few rich specimens to keep as souvenirs and sold the balance of the ore in Phoenix. With the proceeds of the sale the old man built a small adobe house in the flat country near the Salt river where he lived for a number of years.

In February 1891 a great flood came down the Salt river and washed the little house away. Walz was rescued but soon died from an illness brought on by exposure. He was then 84 years of age and took the secret of the exact location of the mine with him to his grave.

There are many versions of the Lost Dutchman mine and as usual many "true maps" have made their appearance since Walz passed away. Some of these maps place the location of the mine in the vicinity of Weavers Needle, where since Walz' death most of the searching has been carried on. In addition to the 47 men killed in the massacre, many others have lost their lives in the Superstition mountains. Often these searchers were inexperienced and died from hunger and thirst. Others no doubt were murdered for the information they were supposed to have.

Unlike the ancient Indian tribes who built their villages in the little valleys, the modern red man has almost fanatical fear of the Superstitions and refuses to go near them. It is undoubtedly true that recesses in the forbidden Superstitions contain the yellowing bones and grinning skulls of many Indians and white men who have lost their lives there. However, it would seem to the writer that if the searchers for the Lost Dutchman mine would disregard some of the old superstitions and confine their operations to the mineralized country around Iron mountain in the vicinity of Pinto creek, they might be rewarded with success and again bring to light the millions in rich ore said to be stored away in the "Lost Dutchman" mine.

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DESERT QUIZ

This monthly puzzle page is one of the most popular features in the Desert Magazine. The desert people like it because it is a real test of their knowledge. The tenderfoot readers like it because it provides an interesting lesson every month in the geography, history, mineralogy, botany and lore of the desert region. If you score 10 correct answers you have better than an average knowledge of the desert Southwest. Only the dyed-in-the-wool desert rats will be able to give 15 proper answers. More than 15 is an exceptional score, seldom attained. The answers are on page 41.

- 1—Asbestos is— Mined from the ground..... Fabricated from cotton..... Sheared from sheep..... Made from coal tar.....
- 2—Early American Indians ground their meal in a— Mescal pit..... Mortar..... Atlatl..... Kisa.....
- 3—The Spaniard who visited the Grand Canyon about the time the American Declaration of Independence was being signed was— Father Kino..... Portola..... Father Escalante..... Capt. Anza.....
- 4—The blossom of the Nolina is— Yellow..... Crimson..... Blue..... Creamy white.....
- 5—Arizona's annual "Buffalo hunt" is held in— Houserock valley..... White mountain Apache reservation..... Petrified forest..... Chiricahua national monument.....
- 6—The color of azurite is— Green..... Blue..... Yellow..... Black.....
- 7—The Southwestern state having the lowest population per square mile is— Arizona..... New Mexico..... Utah..... Nevada.....
- 8—Indians living in Death Valley today are closely related to the— Hualpai..... Pahute..... Mojave..... Papago.....
- 9—Going from Tucson, Arizona, to Guaymas, Mexico, you would cross the international border at— Douglas..... El Paso..... Nogales..... Mexicali.....
- 10—The Mountain men who trapped the Western territory during the middle of the last century derived their income mainly from the furs of— Fox..... Beaver..... Mink..... Coon.....
- 11—The approximate age of prehistoric pueblos in the Southwest is determined by— Indian legends..... Petroglyphs on the rocks..... Tree rings in the roof timbers..... Pottery shards.....
- 12—The crystallizing agent in the formation of sandstone concretions generally is— Quartz..... Calcite..... Gypsum..... Hornblende.....
- 13—The Museum of Northern Arizona is located at— Flagstaff..... Holbrook..... Cameron..... Prescott.....
- 14—The book, "The Land of Poco Tiempo" was written by— Saunders..... James..... Austin..... Lummis.....
- 15—If you wanted to see the annual Inter-Tribal Indian Ceremonials next August you would go to— Santa Fe..... Gallup..... Flagstaff..... Albuquerque.....
- 16—The pass through the mountains of Southern California between San Geronio and San Jacinto peaks is properly known as— Cahuilla pass.... Banning pass.... Whitewater pass.... San Gorgonio pass....
- 17—If you were going to locate a homestead in Arizona you would file your papers in the U. S. Land office at— Tucson..... Phoenix..... Yuma..... Los Angeles.....
- 18—For climbing in precipitous rocks the safest footgear to wear is— Leather soled moccasins..... Rubber soled shoes..... Hobnailed boots..... Leather sandals.....
- 19—Geodes are most often found in— Quartz ledges..... Limestone cliffs..... Conglomerate deposits..... Volcanic areas.....
- 20—Wasatch mountains are located within sight of— Salt Lake City..... Palm Springs..... Death Valley Junction..... Tucson.....

THE SPIRIT OF

76

by JOHN CLINTON



"A primrose by the river's brim, a simple primrose was to him, and it was nothing more." So wrote W.

Wordsworth (I think!). And in my early days I felt that "A gas station by the highway's rim, a simple station was to him, and it was nothing more!"

And then I began this precarious career, and Union Oil stations came into my life. I'd like to tell you something about them. First of all, things happen at Union Oil stations. The Minute Men who operate them, in addition to serving your ordinary needs, also find time for such things as:

Looking for cats that jump out of cars; helping put out neighborhood fires; pumping up bicycle tires for neighborhood small-fry; blowing up toy balloons for parties; making temporary emergency repairs with such materials as hairpins, string and odds and ends.



Lending campers can openers, supplying boots to a forgetful fisherman, minding Junior while his mother went to vote, helping youngsters across unguarded intersections, rushing a bottle of Union Glass Cleaner over to a neighboring airport, extracting miscellaneous articles from back of rear seats.

What a business! The reason I mention it here is simply this... Union Oil Company's Minute Men

are good neighbors, wherever you find them. It's Union's great pride, its constant joy that you, the customer, are generally well and quickly served at Union Oil stations—no matter what you want! Ever try it?



UNION OIL COMPANY

Weather

FROM PHOENIX BUREAU

Temperatures—		Degrees
Mean for month	.....	54.8
Normal for January	.....	51.2
High on January 9	.....	76.0
Low on January 18	.....	36.0
Rain—		Inches
Total for month	.....	1.04
Normal for January	.....	0.80
Weather—		
Days clear	.....	8
Days partly cloudy	.....	12
Days cloudy	.....	11

G. K. GREENING, Meteorologist.

FROM YUMA BUREAU

Temperatures—		Degrees
Mean for month	.....	56.4
Normal for January	.....	54.5
High on January 9 and 31	.....	72.0
Low on January 4	.....	39.0
Rain—		Inches
Total for month	.....	0.83
Normal for January	.....	0.45
Weather—		
Days clear	.....	16
Days partly cloudy	.....	8
Days cloudy	.....	7

Sunshine 69 percent (220 hours out of possible 318).

Colorado river — Release from Boulder dam 593,000 acre feet. Storage January 31 behind Boulder dam 23,410,000 acre feet.

D. R. HARRIS, Meteorologist.

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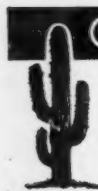
OUR BEAUTIFUL NEW CATALOG 36 fascinating colored pages NOW READY lavishly illustrated Hundreds pictured and described with full cultural directions. A handbook of Cactus lore. FREE TO CUSTOMERS. If wanted for reference 10c is appreciated to cover mailing costs. A real garden hobby. For your copy Write Now! P. O. Box T-5 JOHNSON CACTUS GARDENS HYNES, CALIF.

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R. W. KELLY, Box 235D
Temple City, California



Typical thicket of *Opuntia vaseyi*. Photo taken by the author in the foothills of San Gabriel mountains.



Opuntia Vaseyi

BY ROY MILLER

STRICTLY speaking, this prickly pear is not a native of the desert. Its home is in that fringe of semi-desert country in Southern California which lies between the coastal range and the cultivated lands nearer the ocean. This is a wide strip of territory extending from near San Bernardino and the San Gabriel mountains southeast to the Borrego desert, consisting of foothills and desert-like washes and spotted with cultivated sections and a few small cities. In all the more arid sections of this country *Opuntia vaseyi* is found growing in large sprawling thickets, two to three feet high and as much as 20 feet or more in diameter. In some sections, particularly near Cajon pass, these large clumps grow so thick that only by picking one's way very carefully can the jungles be penetrated.

This species is despised and classed as a pest by the farmer who must clear his land of it but for others it has a redeeming feature in its fine flowers. In the early spring these flowers almost cover the plants, popping out by twos, threes and fours from nearly every terminal pad. They are large and short stemmed with about three rows of petals varying in color from sulphur yellow through salmon, pink, apricot and rose, to magenta. It starts flowering very early in the spring. I have found them in bloom near Elsinore as early as New Years

day—and it keeps on coming until as late as June. Individual flowers last only two to four days but they keep coming in waves and relays furnishing a procession of gay color for nearly six months.

Opuntia vaseyi has caused considerable confusion among botanists who are hair-splitters in taxonomy, not only because of the variation in flower color, but also on account of the many natural hybrids between this species and *Opuntia megacantha*, the Mission cactus, believed to have been introduced by the Franciscan fathers. This confusion has led to the naming of several species which do not deserve that rank, being only varieties or hybrids.

Among cactus collectors of Southern California this species has been neglected in favor of plants from farther afield, but it can be grown into a very desirable garden specimen, fitting in especially well with patio landscaping for the California type of stucco house. It grows readily in cultivation. Cuttings, if dried a few days to prevent rot, are easily rooted and grow rapidly in almost any garden soil. No special care is needed except an occasional trimming to shape the plant into a small tree and keep it from spreading too much. It flowers nearly as freely in the garden as in the wild—usually with larger flowers. After the flowers have gone the fruits, as large as small eggs, start forming. These are green at first turning to a powdery purple as they ripen. They stay on the plant for several months. Thus, between flowers and fruit, the plant is decorative nearly the year round.

Mines and Mining . .

Gold production in the United States during 1940 reached new high for all time. California's output, valued at more than \$49,000,000, gives that state top rank. Estimates by the mint say the nation's mines yielded 5,914,109 ounces of gold at \$35. per ounce worth \$206,993.80. This beats the earlier record of 5,611,171 ounces valued at \$193,391,000, established in 1939. California's 1940 record: \$49,179,200, and 71,688,150 ounces. Silver mining made new records in 1940, setting a high mark of \$50,977,440 in value with production of 71,688,150 ounces. This quantity does not equal 1915 output, but value is greater, due to the government's silver buying program. Idaho is the leading state in silver production: \$12,378,770 and 17,407,918 ounces.

Winnemucca, Nevada . . .

Mining made James Dahl a millionaire and mining made him a pauper. He was found dead in a squalid hovel behind the cemetery here at age 64. Dahl was born in Denmark, prospected in the Alaskan Klondike, struck it rich when he was cleaning out a well at Copper canyon, Lander county. He was worth \$1,500,000, it is said, and put his money back into unprofitable mining. Since 1925 he had lived the life of a hermit, scorning charity, made his living by rifling city dump grounds.

Fallon, Nevada . . .

Twenty tons of scheelite are being treated daily at the plant of the Hall, Blanchard and Sorensen property near Toy, and it is announced that the mill will be run soon at full capacity of 40 tons. The mine was discovered last May, is said to contain three ore bodies, the main vein yielding ore averaging approximately 4 percent tungsten.

Winterhaven, California . . .

Kenneth and George Holmes, operators of a gold mill west of here on Highway 80, have leased the famous Vanderpool-Murphy property in the Chocolate mountains, where nearly two years ago ore high in gold values was discovered. Leasers are doing extensive sampling, expect to start development within 60 days, it is announced.

Auburn, California . . .

Eighty construction workers on a dam near Auburn, California quit their jobs and dug for gold when an earth slide at their job uncovered a rich deposit. The gold diggers organized the "Ruck-a-Chucky partnership" and Uncle Sam says they found at least \$80,000 in their accident-inspired mining. Now the government claims this gold was taken from federal land, is the property of the United States, and should be turned in to Uncle Sam by its discoverers.

Nephi, Utah . . .

Working two shifts a day, four crews are operating two diamond drill rigs, sampling Drum mountain manganese deposits in this county. Under direction of the federal bureau of mines, this is the first large-scale testing of Utah manganese in the search for domestic supplies of strategic minerals needed in the national emergency. Work will continue at Drum mountain until middle of next summer, with Richard Lee in charge of drilling and sampling.

Reno, Nevada . . .

Nevada's mines yielded greater dollar values during the past year than for any 12 months since 1918. Gold, silver, copper, lead and zinc output in the state for 1940 had total worth of nearly \$36,000,000, an increase of approximately \$6,000,000 over the aggregate for 1939.

Tonopah, Nevada . . .

Establishment of the war department's bombing range in an area 100 miles long and 50 miles wide, including territory where mining is under way is causing concern to some operators. In the reserve is located part of Mysterious Forty-Mile country, where rich gold float tantalizes prospectors. No more claims may be located in the bombing range, but existing mines will not be affected, beyond the possibility of exposure to exploding bombs dropped from planes flying high in the sky.

Prescott, Arizona . . .

"Look for pegmatite." This is John Bland's advice. He is here from his home in the Black Hills district of South Dakota, to make a survey of pegmatite deposits in Yavapai county, on invitation from the local branch of the Arizona small mine operators association. Altogether, 175 minerals are on the "pegmatite list." Many are commercially valuable, among them beryllium, tin, tantalum, columbium and lithium. Amblygonite, of the lithium series, is worth \$35 to \$50 a ton, looks like feldspar and can be identified by a simple test. Sprinkle a little of the powdered material over gasoline flame and it makes a bright purplish-pink light. Pegmatite, as generally used, includes many coarsely crystalline granitized rocks.

Phoenix, Arizona . . .

Arizona holds on to her crown as queen of the copper producing states, maintaining in 1940 the lead she took 33 years ago. Federal bureau of mines preliminary reports credit the state with \$81,509,300, value of copper, lead, zinc, silver and gold mined during the year, an increase of 12 per cent over the 1939 period. Copper production was up 6 percent with 558,000,000 pounds. Lead increased 18 percent to 25,500,000 pounds. Zinc output jumped from 13,422,000 to 30,800,000, a raise of 129 percent. Gold dropped from 316,453 ounces to 292,500, loss of 8 percent and silver fell 11 per cent from 7,824,004 ounces to 6,948,000. Dollar values: Copper, \$63,054,000; zinc, \$2,002,000; lead, \$1,275,000; gold, \$10,237,500; silver, \$4,940,800.

RARE EXHIBIT NOW IN PROGRESS IN LOS ANGELES

As this number of Desert Magazine comes off the press the Western Mineral exposition will be in progress at the state exposition building in Los Angeles. The mineral show opened February 15 and is to close eight days later.

Among the many interesting things to be seen at this unusual exhibit are Indian craftsmen, including both silver and pottery workers, rare displays of both gem and strategic minerals, gold panning in actual operation, and a wide range of equipment used in the cutting and polishing of gem material.

Several private collections of stones, with values ranging into six figures, are on display under special guard.

The exposition doors are open both afternoon and evening during the display.

The Desert TRADING POST

Classified advertising in this section costs five cents a word, \$1.00 minimum per issue—actually about 2½ cents per thousand readers.

MISCELLANEOUS

BEAUTIFUL SOUVENIRS of the desert, made of cactus wood by sick veterans. Calendars 25c—paper knives 25c—Old rugged cross (8 in. high) 50c—Lamps from \$1.50 to \$5.00. Postpaid. Camp Major-Jo, Vicksburg, Arizona.

INDIAN RELICS. Beadwork. Coins. Minerals. Books. Dolls. Old Glass. Old West photos. Miniatures. Weapons. Catalogue 5c. Vernon Lemley, Osborne, Kansas.

250 PERSONAL POSTCARDS with your name and address printed. Attach 1c stamps as used. Printcraft Studios, Box 632, Inglewood, California.

LIVESTOCK

KARAKULS producers of Persian Lamb fur are easy to raise and adapted to the desert which is their native home. For further information write Addis Kelley, 4637 E. 52 Place, Maywood, California.

MAPS

BLACKBURN MAPS of Southern California desert region. San Bernardino county 28x42 inches \$1.00; San Diego county 24x28 inches 50c; Riverside county 50c; Imperial county 19x24 inches 50c. Postpaid. Add 3% sales tax in California. DESERT CRAFTS SHOP, 636 State St., El Centro, California.

REAL ESTATE

VERITABLE GIFT! 22 acres at Yucaipa. A1 location, on paved street; 3-room habitable shack; 2-car garage; 5 acres of splendid walnut trees, 2 acres of oranges and prunes, remainder in rich level soil. Total price \$3200. \$1700 cash required. Rarest bargain. Act quickly. Address:—179 South Orange Grove Avenue, Pasadena, California.

ON EDGE OF MOHAVE, elevation 3500 feet, clear dry air extremely healthful, furnished with oil furnace, gas, mountain spring water. Address 521 W. Main St., Alhambra, California.

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FLEXIBLE STEEL VENETIAN BLIND SLATS

6

Reasons *why* *you should visit* 29 PALMS

Most of the places you have been reading about, places you have always wanted to see, are but a few minutes from the heart of TWENTYNINE PALMS. Come this weekend. Visit these scenic and historical wonders:

A "Must" for all visitors is a trip to the Joshua Tree National Monument. Here you will find a forest of trees that Randall Henderson, Editor of the DESERT MAGAZINE describes as "The Joshua has what the lecturer on salesmanship calls personality-plus. It is a clown, a villain, an elusive fairy, a witch—in fact it is everything or anything you want to make of it."

Gem and mineral collectors will find near here one of the most interesting gem areas in California. Many fine specimens are found every day. New fields await those who like to explore beyond the beaten trails.

Health seekers find this the ideal resort. Many physicians believe that the ultra-violet rays in and about TWENTYNINE PALMS are extremely beneficial in many cases of illness. Many have come and benefited. Perhaps you, too, will gain health in our dry climate.

Adventure! Who can deny that adventure lurks in every turn of the desert for those who seek the lost gold mines or who feel the urge to seek the lost valleys that are here.

The Yucca and 29 Palms Valley will repay in pleasure and astonishment those who visit here. But all this is but a part of the varied, scenic and healthful joys that await you when you visit 29 Palms.

The people of 29 Palms combine in an unusual manner the leisurely, friendly hospitality of real desert folks—with the most modern and reasonable accommodations—be it hotels, courts or trailer camps.

For delightful days you will always remember, come to . . .

29 PALMS

JUST 3 HOURS FROM LOS ANGELES

LETTERS

Spanish Fork, Utah

Gentlemen:

Enclosed is \$1.50 for a copy of the book ON DESERT TRAILS WITH EVERETT RUESS.

I happen to be one of the individuals who saw Everett while on his last adventurous trip. I shall never forget his burros, and his face, swollen from the bites of yellow jackets or hornets.

Hope the day will come when I can join with some Escalante boys and search for his remains, as some of us have planned to do.

I was fearful of the outcome when I learned of his plans to go down into the Escalante desert around Fifty Mile mountain and up the Last Chance river and canyon. Much of my life has been spent in the remote sections of Southern Utah, and those are my happiest days. But for someone unfamiliar with trails, potholes, slick sandstone, deep snow in winter and deep canyons, it is not a place to go alone, especially with a meager supply of food.

J. AUSTIN COPE.

. . .

Pan-American Airways
Midway Islands
North Pacific Ocean, U.S.A.

Dear Mr. Henderson:

Enclosed please find my check for \$6.00 for which kindly renew my subscription for two or three years. I find every copy more interesting than the last one.

I am now a long way—over 4,000 miles—from my old home on the desert at Blythe, California, where I lived for eight years. But thanks to Pan-American Airways I can return to the desert in four days. That is fast traveling compared with the trips I used to make around 1910 across the Chuckawalla valley to Mecca and Riverside.

I expect to take a two or three month vacation in 1942, and will certainly drop in and see you. The desert draws one back, as do the Islands. I mean Hawaii and the Philippines. During the past 15 years I have traveled in Japan, Formosa, China, Malaya, Ceylon, south India and the Philippines in search of useful parasites with which to control destructive insects for the experiment station in Hawaii. For the past four years I have been stationed at Midway Islands 1300 miles northwest of Honolulu where it is my duty to prevent the Clipper ships from bringing dangerous pests into Hawaii.

Conditions here are just the opposite from the desert—we are surrounded by water and the rainfall is about 50 inches a year. Kindly send the magazine in care Pan-American Airways, Honolulu, T. H. They are forwarded to me by plane free of charge.

FRED C. HADDEN.

. . .

Ontario, California

Dear Editor:

We wish to compliment you on the excellent magazine you are publishing for the benefit of desert lovers. "We" consists of my wife, two sons, and myself.

We spent New Year's day upon the desert, far from the maddening crowd of Rose parades, football games, radio rackets, war-propaganda speeches, etc. New Year's day dinner somehow tastes better when eaten out under the sunny sky.

Do you remember that article you printed in

your April, 1940 issue titled "Hilltops Paved with Gem Stones," by Mr. Hilton? Well, last Sunday we decided to follow the map which accompanied it, and found the place. Also got a few specimens.

Staying overnight at Barstow we arose next morning and were on our way just in time to see the glorious desert sunrise. Made it to the spot described in little over two hours.

In the vicinity of Bicycle lake we were told there is to be started soon a military camp and anti-aircraft and bombing base. We can imagine some of these "rookies" stationed there roaming around in search of those gem stones which adorn the surrounding hilltops, as described by Mr. Hilton. We hope there will still be some left when next we make this trip.

From there we drove to Cave Springs, which is now in charge of a war veteran and his wife, Mr. and Mrs. Ryman, who formerly lived in Sawtelle. They offered to show us the caves and seemed to be glad to see us.

For the benefit of those of your readers who have never visited Cave Springs, which is located about 20 miles from the entrance to Death Valley, these springs were the old watering place for the drivers of the 20-mule teams belonging to the Death Valley Borax company and are quite interesting.

The springs themselves are formed out of solid rock. There is a blacksmith's shop, which is also made out of rock. The caves where the drivers ate and slept, have been hewed out of the cliffs, and there is a fireplace with a natural rock chimney where they cooked their meals.

We offered to give Mr. Ryman a copy of the Desert Magazine which we carried in our car. But he informed us that he was already getting it. So we gave him a Los Angeles newspaper of the night before which he was glad to get as news is scarce out there and the radio only seemed to function at night-time.

LEO E. H. KOCH.

P. S. Our pet peeve is those morons who fire bullet holes in desert signs. They should be horse-whipped!

. . .

Reseda, California

Dear Mr. Henderson:

Please find enclosed dues for another year's subscription for the wonderful magazine. Of all the magazines which I read I enjoy yours and the Mineralogist the most.

After seeing you I went to the carnelian field as was described by John Hilton, near Salome, Arizona. There is a good road to the field, and can be entered either by Salome or Hassayampa.

I met a man there from San Joaquin valley who seemed to think that he owned the whole state of Arizona, but after a while he cooled down and showed me a good place. I can agree with him in a measure, when some clubs carry off everything.

There is any amount of very fine specimens of both red, white, and red and white mixed, and some beautiful "desert roses." I have cut some pretty "watered" effects from the pieces.

With kindest wishes, I am,

FRANK R. DONALD.

. . .

Borrego, California

Dear Mr. Henderson:

Please find money order for \$1.50 for another six months subscription to your good magazine. We old desert rats do enjoy it. I used to roam so many of the places you write about. But have been here in Borrego since 1912 and before that I lived one mile west of Imperial town in 1902, so you see I can truly say I am a desert rat. We have lost our postoffice out here but get mail by rural route so am sending my new address. With best wishes for you and your staff.

A. A. BEATY.

The DESERT MAGAZINE

Los Angeles, California

Dear Sirs:

Enclosed find check for \$6.50 for new subscriptions to the Desert Magazine. Your article of the Oatman massacre was very authentic. As we are descendants of that family, we appreciated the story very much.

We are all "Desert Rats" and enjoy your magazine from "cover to cover."

E. L. OATMAN.

• • •

San Bernardino, California

Dear Mr. Henderson:

The article on Lost Arch Placer Diggings appearing in Desert Magazine for February creates in me an urge to comment. If John D. Mitchell presents his article as fiction, well and good, although even so it is far from convincing. If as fact, then correction, nay, refutation, seems to be in order.

The tale of the Lost Arch Placer Diggings is an old one. Goodness only knows how it started. In the first decade of this century an article appeared in Adventure magazine concerning these mythical placers. At that time I was living in the eastern part of the desert and knew the Arch and the fable concerning it quite well. I wrote to the editor, giving him the plain facts. He thanked me and published my letter in a subsequent issue.

These plain facts are that there never were any such placers at all. There is a natural rock arch in that country and it was no secret to those few of us who then roamed the desert. It is not easily discernible or easily found, however, and most certainly there is no placer gold anywhere in the vicinity. I have "dry panned" dirt all around there and never got a color of gold.

That country is by no means unknown. As far back as 1892 William Hutt, Gus Yeager and I together with a Pah-Ute Indian named Johnny Moss (who was killed some years later by Mexicans at Bagdad) covered all the country mentioned. After hunting sheep in the Turtle range we traveled from Coffin spring around the north end of the Turtles, then across the open desert to Sunflower spring in the Old Woman mountains. Thence we made our way back to the west side of the Turtles and followed that range northward, prospecting for both quartz and placer, with no luck. All that west side of the Turtles has been run over by prospectors ever since then and probably not an ounce of placer gold has ever been taken out. And there never was a waterhole in that country big enough to furnish water for the making of adobe bricks.

As for sluicing, the very idea is preposterous. Yet Mr. Mitchell blithely has his Mexicans make enough adobes to build a two room house, complete with "arch," then sluice out \$30,000 in placer gold! All this in as dry a country as can be found anywhere. Then he has the camp equipment carried off by Mojave Indians. Now that was strictly Chemehuevi territory and you couldn't then have hired a Mojave to go in there for love or money.

Apart from the trifling exceptions herein noted Mr. Mitchell's article is eminently correct.

My companions of those days are just about all gone now, but my old desert friend R. A. (Bob) Martin, now of Oatman will bear me out in all I have written here.

CHARLES BATTYE.

Thanks, Mr. Battye. Lost Mine stories written by Mr. Mitchell for the Desert Magazine are offered for what they are worth—never as fact. Like the Lost Mines themselves, many of the legends current in the desert are pure myth. Others have an element of truth back of them. In any case we are always glad to publish authentic information from the old-timers, such as you have given us. —R. H.

Los Angeles, California

Dear Sir:

More people than I believe you realize will be missing Marshal South's articles. It seems that we all ought to get together and do something to get him back.

You see Marshal South is the "escape" of a lot of people running on tread mills, racing in squirrel cages, slaves to businesses, jobs, possessions and conventions. Lots of us know full well that our striving is futile and the more we get the heavier the load, but convention and modern life has so cast its spell upon us that we can't pull away from it.

So we escape through Marshal South. He does the things we would like to do . . . he lives our dream life for us . . . and boy we are going to miss him terribly. Do try to get him back.

Of course I sometimes wonder if Marshal South really is a person, and if he actually does live up there on his unpronounceable mountain. He might be just the figment of the editorial imagination. And if he does exist I wonder what he looks like in pants and coat, and what was his previous life and how did he ever get the guts to do what he is doing. Or has he given up the life and moved back into town.

But whether fictional or real, for heaven's sake keep him going. We are going to be plumb lost without him. Incidentally his gag would go well in book form.

WALLACE M. BYAM.

Marshal South will have more stories in Desert Magazine. In fact he is working on some manuscripts now that probably will appear in the DM during the next few months. —R. H.

• • •

Las Vegas, Nevada

Dear Mr. Henderson:

I am coming to you for help. I believe that any man who can put out a magazine like Desert, will understand how I feel. You and your readers can do something to correct a foolish idea that has become current.

I read in your February issue about the burros crowding out the bighorn sheep in the Lake Mead area.

Those wild burros are among the most attractive things along the shores of the lake and there is so little wildlife on the desert they should be protected. As for the burro eating the feed and driving the sheep away from the lake, it is too ridiculous to think about.

I've been the length of the lake many times, have climbed back into the canyons and tramped for miles on the slopes that run back from the caves. There is feed for many times the number of animals that live there, and as for the burro keeping the sheep away from drinking water—well, anyone who has been there knows how impossible that is.

I hope you can stop that crazy idea of killing the burro that has played so important a part in developing the west. I know you can help for the people who read such articles as you publish are the kind of people with big enough souls to remedy such wrongs.

Please don't throw this in the waste-basket until you have given some thought to this question.

D. TUCKER.

• • •

San Francisco, California

Dear Mr. Henderson:

Thanks to the faithful reporting of John Hilton we learn that the historic Bradshaw Trail is in a sad state of disrepair and that the Canyon Springs station is crumbling rapidly.

I know it will not fall on deaf ears, Mr. Henderson, to ask for your support in the way of editorial comment to have the Bradshaw trail improved and the Canyon Springs station repaired.

HENRY J. BLOOM.

Commencement Exercises



Once upon a time, or thereabouts, starting an automobile was a hand-made job.

Commencement exercises were celebrated with a crank and a strong right arm.

Trying to get a motor going was the turning point in many a car-owner's career—and he kept on turning till his wind and his patience were exhausted.

Even after the self-starter was invented, any motorist who showed his battery with neglect often had to exhume the old handle and do some emergency cranking.

He would suddenly find out that not only his starter wouldn't start but also his lights wouldn't light and his ignition wouldn't ignish.

But now days cars are coming without any cranks at all. So it is more important than ever that the little black box always be filled with currents.

It's downright necessary to have the car's volt vender irrigated regularly and its pulse taken.

Keeping a battery up is no more complicated than ordering a ham sandwich. All a body need do is drive into the nearest Shell Dealer's Service Station.

Any Shell man will test and fill those cranking cells for free—and glad to do it, too.

And any Shell man knows how to keep ample amperes in storage so there will be no chance for a battery to up and expire like a notary's commission.

—BY BUD LANDIS

These Lands Belong to the Public

EDITORIAL

WHEN Gen. Stephen Kearny in 1846 marched his ragged army of the West across the Southern California desert, up Carrizo creek and through Vallecitos valley, he little dreamed that nearly 100 years later a bitter controversy would be waged over the ownership of a large section of this forbidding land.

The Carrizo-Vallecitos region in his days was an arid and hostile desert — a place where no sane human would want to live.

The terrain is the same today as when Kearny came this way. It is true, a make-shift road follows the Kearny route now, and cattlemen have found sufficient forage along the Carrizo and Vallecitos creeks to run a few hundred head of livestock in the area. But the water supply is very limited, and not more than a half dozen families have ever found it possible or desirable to establish homes in this region.

And yet, today, a little group of people in the city of San Diego are clamoring

against the proposal of the California Park commission to make this area a park reserve—the Anza Desert State Park.

It seems strangely inconsistent that this opposition should come from San Diego. For it was in that city, many years ago, that a little group of men—Fellows of the San Diego Society of Natural History — first sponsored the idea of a great desert park in eastern San Diego county.

* * *

Within the next four months a decision by the California Park commission will have a critical bearing on the future of the Anza park project. In order that readers of the Desert Magazine may have a clear understanding of the issues now at stake, the following information is given:

In response to the petitions of a group of civic leaders and scientists in San Diego, the California Park commission in 1930 agreed to the establishing of a desert state park and took steps to acquire lands in the Borrego valley area for inclusion in the park reserve. During the intervening 10 years approximately 200,000 acres of land in the Borrego area have been acquired for park purposes.

Soon after the inauguration of this desert park program civic organizations both on the desert and on the coast proposed that the park areas be extended south to include the Vallecitos and Carrizo valleys where the region not only is rich in desert flora but also in historical and scenic landmarks.

Most of this area is in the public domain, and on June 29, 1936, Congress voted to deed more than a half million acres of this region to California for park purposes. The only condition was that California must pay the land office filing fee amounting to \$1.00 for each 80 acres.

In 1938 California Park commission paid \$1,976 in fees for the first block of this land—155,947 acres. Before patent had been issued, however, protests were filed by San Diegans who asserted the county would be deprived of rich agricultural and mineral resources if this was made a public park. In order to give opponents time to present their case, the Park commission withheld taking the patents on the lands, and the matter is still in abeyance.

A second block of 209,443 acres has also been selected by the Park commission, but the filing fees have not yet been paid. Recently the commission announced that it lacked the \$2618 necessary to pay the filing fees on the additional tract of land.

Civic groups, headed by the Anza Memorial Conservation association of Imperial valley, are now seeking to raise these funds from private sources so the vast potential park area will not be lost for lack of the necessary .0125 cents an acre.

Assuming that the money will be provided, the issue is now squarely up to the California Division of Parks. The com-



right from the range

A *Desert Fashion that takes its cue from the cowpunchers. Flaring skirt of dark blue denim, shirt of blue and white striped ticking. With Indian concho buttons and a handsome cowboy belt of leather, tooled and studded. Original and exclusive. The fabric is softened, pre-shrunk and precisely tailored. In sizes 12 to 20.

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GOLDWATERS Phoenix, Arizona

*Trademark registered
U. S. Patent Office

mission has tried to be fair to both sides. It has deferred its decision until opponents were given every opportunity to verify their assertions as to the agricultural and mineral resources of the land involved.

So far this proof has not been forthcoming.

If there were rich mineral or agricultural resources in this area, it is needless to say they would have been developed long ago. They have remained idle and unoccupied because they have little value except for scenic and scientific and recreational purposes.

Under the act June 29, 1936, the California park commission is required to make its selection of lands within five years—which means that the state will lose its option next June 29.

* * *

This controversy is the same that has been waged down through the years since time immemorial—a conflict between those who would conserve the resources of the soil for the benefit of all citizens, and those who would exploit them for private gain. United States has a fine system of national and state parks. Every American citizen is proud of them, and a majority of the people have had the opportunity to visit and enjoy them.

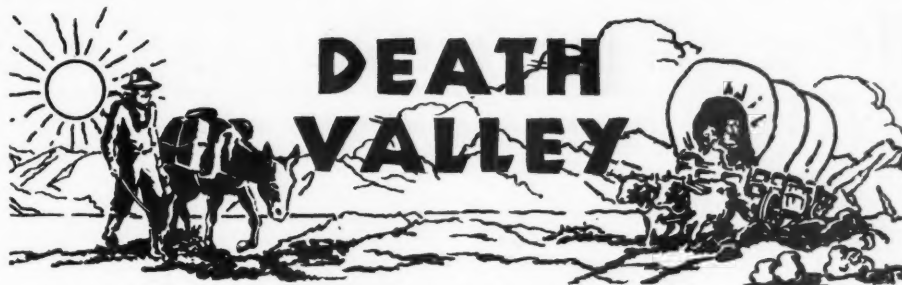
There was opposition to the setting aside of those park areas in nearly every instance. It was true at Yellowstone, and in Grand Canyon — and even in Death Valley. The parks were won only because a great body of far-seeing Americans were willing to sacrifice their time and effort and funds to overcome the opposition of self-seeking interests.

Today the great desert rim that extends along the west side of the Cahuilla basin in Southern California is the stake in a modern version of the age-old controversy.

The time is short when a decision must be made. The opposition has raised a great clamor—and unless the men and women who favor the inclusion of these lands in a desert park are also outspoken in their demands the decision may go against the park. The state commission is composed of able men who want to serve California's best interests. But they do not know what you and I want unless we tell them.

Desert Magazine readers who would contribute to the success of the park program may do two things. They may write to the California division of parks at 417 Montgomery street, San Francisco, and they may contribute funds to the Anza Memorial Conservation association, El Centro, California, for the payment of filing fees. One dollar pays the fee on 80 acres. The sum required is \$2618. If for any reason these donations are not needed for that purpose for which they are solicited they will be refunded to the donors. Funds contributed to this cause will be reported through the columns of Desert Magazine.

MARCH, 1941



FURNACE CREEK CAMP—CABINS, COTTAGES

Located at Furnace Creek Ranch. 150 cabins and cottages. Cabins with or without housekeeping; three- and four-room cottages for housekeeping. Camp store. Restaurant. Lunch counter.

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THE AMARGOSA HOTEL . . At Death Valley Junction, affiliated with Furnace Creek Inn, is conveniently located to major scenic attractions.

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Power that comes from the melting snows . . .



In another month the great snow banks of the Rocky mountains will be melting—sending rivulets of clear cold water down the slopes to combine and form the mighty Colorado river.

It is from this river that the Imperial Irrigation district derives the electrical energy to supply homes and farms and shops of the Southern California desert region.

NO ONE PERSON OWNS THE COLORADO RIVER

It is an asset that belongs to all the American people. And since the river belongs to the public, it is only right and proper that the power derived from this great stream should also be a public-owned enterprise.

And that is just what the Imperial Irrigation District is—a co-operative corporation, owned and operated by all the people of Imperial Valley, to supply water and power at minimum cost.

The more widely distributed are the power lines, the lower will be the cost of electricity, and the greater the number of people who will benefit.

AS A MATTER OF SELF-INTEREST, IT IS TO YOUR ADVANTAGE TO MAKE SURE THAT THE METERS SERVING YOUR HOME OR BUSINESS ARE **IMPERIAL IRRIGATION DISTRICT METERS.**



Desert Place Names

Magazine is indebted to the research work done by the late Will C. Barnes, author of "Arizona Place Names;" to Betty Toulouse of New Mexico, Hugh F. O'Neil of Utah, Marie Lomas of Nevada, and Charles Battye of California.

ARIZONA

CANELO (ca-né-lo) Santa Cruz county
Sp. *canela*, "cinnamon." South of Babocomari grant. When the small range known as the Canela hills was in Mexico, prior to the Gadsden purchase, the mountains were so called because from the south they have a light brown color, cinnamon-like. Robert Rodgers, one-time forest ranger wrote: "I moved here in 1904 and asked for a postoffice to be called Canille. This spelling was mine. Name was approved and p. o. established. Later the forest service set aside a ranger station site here, as Canela." Officially Canela was changed to Canelo.

GILA BEND (hee-la) Maricopa county
Barnes says the word *gila* appears to be of Indian origin, meaning spider, and according to Bancroft the name was first applied to a province in New Mexico, near source of the Gila river. McClintock reports a Yuma Indian in his employ told him "e-el" means salt and "hah" means

water, literally salt water. Gila Bend is a town on SP rr about 35 miles west of Maricopa, named from location near the "Great Bend" on the Gila river which comes in from the north and resumes its westerly flow at this point. About 1925 the railroad shortened it to Gila to save telegraphing, writes the SP agent at Gila. Gila Bend of 1877-80 was a well known stage station on the river about 6 miles north of the present railroad station. Post-on in Apache Land records:

"Arrived at last at Gila Bend
Our river journey comes to end
'Tis wise to stop here, wheels to tauter
To rest and fill the cans with water."
Postoffice established May 1, 1871,
Albert Decker, p. m.

HUBBELL BUTTE Coconino county
In Grand Canyon national park on west wall near northeast corner of park. Named for J. Lorenzo Hubbell, who settled on Navajo reservation in 1871. He was a pioneer Navajo trader, county sheriff and

member of the seventeenth territorial and first state senates. Defeated 1914 for U.S. senator by Mark Smith. Butte named by Will C. Barnes. Hubbell was born at Pajarito, New Mexico, in November 1853, died at Ganado, November 11, 1930, aged 77. Was buried on a hill near his store where more than 20 years before his friend Chief Many Horses of the Navajos was buried with the understanding between them that Hubbell would be buried by his side.

CALIFORNIA

TURTLE MOUNTAINS

San Bernardino county
So named, writes Charles Battye, probably because of the abundance of desert "turtles" in the vicinity. (Desert Magazine, June 1938, p22). Old timers around Ehrenberg referred to it as North mountain, but the present name is better, Battye believes, and it has prevailed. This entire range as well as the spring beneath the peaks, is called *Ma-pah* by the Chemehuevi Indians.

NEVADA

NEVADA Silver state
From Andalusia in Spain comes the name Nevada, meaning snow-clad. The Spanish padres found the counterpart of their own Sierra Nevada in the mountain range separating Nevada and California. They passed the name on to the jagged, snow-capped peaks from which the Silver state, or Sagebrush state, later derived its name. Until 1848 Nevada was part of Mexico. Eleven years later it was organized with Utah into a territory. It became a separate territory in 1861 and was admitted into the union officially as the state of Nevada in 1864. Fray Francisco Garces, the adventurous missionary-frontiersman at San Xavier del Bac, was first of the Spanish to set foot on what is now Nevada soil and to leave written records of his journey. He crossed the southernmost tip on the historic expedition of 1775 which discovered an overland route from Sonora to Monterey.

NEW MEXICO

DOMINGO (doe-min-go)
Sandoval county
Sp. Dominic from Saint Dominac. Originally called Wallace in 1880 in honor of New Mexico's author-governor, Lew Wallace, the name of the town was changed in 1890 to honor newly elected Governor Thornton. This name was difficult for the Spanish and Indians to pronounce, so on January 1, 1910 the name officially became Domingo because of its proximity to Santo Domingo Indian pueblo.

To all true friends of the desert . . . Your Help is Needed

Unless funds are available before June 1, 1941, to pay the filing fees on 209,443 acres of land in the Vallecito and Carrizo desert areas, there is grave danger that it will be forever lost to the public for park purposes.

Briefly, the situation is this: By act of Congress, the California Park Commission has been given the privilege of acquiring this land for state park purposes by paying the filing fees necessary to acquire patent. The Park Commission has stated that no funds are available for this purpose. The money must be raised from private sources.

The filing cost is \$1.00 for each 80 acres—or a total of \$2618 to acquire the entire tract set aside for the Anza Desert State Park.

Will you contribute to this fund? Every dollar you pay will provide 80 acres of desert park in one of the most fascinating desert regions in the Southwest. This appeal is sponsored by a non-profit organization, with the pledge that every penny received will go directly into the purchase of these lands. Not one cent will be used for overhead or salary or office expense of any kind.

Send contributions to the following, and receipt will be issued immediately:

Anza Memorial Conservation Association

John R. Adams, President — Arthur L. Eaton, Secretary
Care of Bank of America, El Centro, California



Mud Houses in Nevada!

Who can identify this picture?



Magazines WANTED

We are needing certain back issues of the Desert Magazine to fill orders for complete files. We will pay . . .
\$2.50 each for good copies of the No. 1 issue, November '37
\$1.00 each for good copies of February '39 and May '39.

Effective this date, the price list for back numbers available at the Desert Magazine office is as follows:

First three volumes complete, Nov. '37 to Oct. 40 \$10.00
First three volumes complete with loose leaf binders \$12.00
First three volumes, minus Nov. '37, Feb. '39 and May '39 \$5.00
Back copies, with the exception of the three missing numbers listed above, 25c each, 12 for \$2.50, 24 for \$4.00

It is not the policy of Desert Magazine to increase the price for back issues as long as we can fill orders from our own reserve supply. However, the reserves are running low and readers who desire to complete their files should not delay.

THE *Desert* MAGAZINE

El Centro, California.

Prize Contest Announcement

For this month's landmark contest, the Desert Magazine has gone to southern Nevada and photographed some dwellings that have a marked resemblance to the pueblos of ancient Indians.

Who has seen these dwellings? Where are they located? Who built them? No doubt the readers of this magazine will be interested in the answers to these questions.

In order that this data may be published, a prize of \$5.00 will be paid to the person who sends in the most accurate and informative story of not over 500 words. The manuscript should not only give the location and history of the buildings, but should include some reference to their Indian background. Answers must reach the Desert Magazine office by March 20, 1941, and the winning story will be published in the May number.

INFORMATION WANTED

In January the Desert Magazine's Landmark photograph was of the old soda works on the road between Keeler and Darwin, in the Death Valley region. Evidently the place is not well known, for there were no contestants for the prize—the first time in the 3½ years this contest has been running.

However, there is a story in connection with that old soda works and prize offer will be continued for another 30 days—to March 20. Refer to your January magazine, page 29, and if your knowledge of ghost mining camp history includes this camp, send in the story—not to exceed 500 words.



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and to
ARIZONA'S
**SCENIC
WONDERS**
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**BLYTE
CALIFORNIA**

HERE AND THERE

... on the Desert

ARIZONA

Phoenix . . .

When John Goodwin, first territorial governor, 76 years ago delivered his message at the capital in Prescott, Neri Osborn sat in the legislative chamber. In January of this year, the same Neri Osborn had a seat of honor here in the Arizona house and heard his son, Sidney P. Osborn, deliver his message as governor to the 15th state legislature.

Fort Huachuca . . .

You'd think Tombstone, Bisbee and Douglas are in the midst of boom mining days. There's a weekly payroll of more than \$150,000 among the 3,000-plus construction workers here, where Uncle Sam is spending \$6,000,000 to build a home away from home for his trainees. When paychecks flutter in the air every Wednesday, merchants keep their doors open until 9 o'clock at night, and banks ditto. In eight weeks roofs were laid on 192 new buildings. Two hundred twenty structures are being erected, crews working on seven days a week schedule.

Globe . . .

Six thousand catfish, 4 to 18 inches long, have been planted in Coolidge lake by K. C. Kartchner, state game warden.

Yuma . . .

Long before World War I, a lone woman drove two burros into the isolated wilderness of the Cibola country along the Colorado river north of here. There for a quarter century she lived apart from human society. She had a small herd of goats, 29 stands of bees. During all these years she never left her remote shanty home. Her only contact with the outside world was an aged recluse who lived at the desert's edge along the river. In January county officers heard the elderly woman was in want, investigated. When they escorted her to Yuma she saw a paved highway for the first time in her life.

Tucson . . .

Arizona's irrigation reservoirs now hold more water than at any time since 1924, reports a bulletin from the state university. Annual agricultural forecast, by Dr. George W. Barr and Howard R. Baker, points to a shift from cotton growing to "war commodity production—beef, wool, dairy and poultry products especially in demand by armies and navies . . . and the feeds necessary to produce the above commodities." Continuing increase in the number of cattle is predicted for the next three years.

Phoenix . . .

Rate 14-year-old Boy Scout Robert Carson as expert marksman. When he came clambering up a rickety ladder out of an abandoned mine shaft, Robert borrowed a handful of marbles from a friend and silently descended to the bottom of the shaft again. There he unlimbered his slingshot, loaded it with a marble and fired in the semi-darkness at an eight-rattler snake. He used three marbles to make the kill.

Fort Defiance . . .

"What about our Navajo youth?" is a continuing topic in the Indian service. Ninety-five percent of the Navajo who go away to school return to the reservation. Returned students are placed on small tracts of land, given implements and seed. Later they repay the government. But the catch in this plan is lack of farming land on the reservation. Even now arroyos are being farmed, despite the fact that they are also eroding.

Yuma . . .

Scientists are studying "upside down" bird and animal tracks on the ceiling of an overhanging cliff in the rugged Buckskin mountains of northern Yuma county between the old ghost mining town of Swansea and the Bill Williams river. George Robinson led an expedition to verify his disputed discovery of three-toed bird tracks, the imprint of deer hoofs and marks resembling those of a horse's hoof, all plainly visible on the underside of an almost horizontally jutting slab of rock. So far, paleontologists advance two suggestions: (1) That the apparently gravity-defying strollers walked around with their feet glued to the ceiling, or (2) that the tracks were made in soft stone, later hardened and turned upside down by a vast earth upheaval. But they declare no birds, no horses lived in that part of the world when the sedimentary deposits were laid down, later to become a form of sandstone. Also, they are inclined to skepticism as to the earth's crust turning over in its bed.

CALIFORNIA

Death Valley . . .

Bette Davis was making a desert scene for "The Bride Came C. O. D." She was supposed to jump onto a hillock of soft sand from an airplane after a forced landing. Bette jumped, according to script. She saw—too late—a clump of cactus. After they had helped her into a hotel, a doctor removed 45 cactus thorns from her and then told her to rest on a couch, face down. Postponed was another sequence, in which James Cagney shoots Bette with a slingshot in the same place where the cactus stuck.

Barstow . . .

The desert has its place in national defense. On an 800,000-acre anti-aircraft firing range, work crews hustle to build first units for 2500 soldiers in camp 36 miles northeast of here. Campsite is on rolling land at approximately 3,000 feet elevation, commands magnificent view of the Mojave desert and Avawatz mountains. After preliminary training near March field, men will be transferred from base to range for actual firing experience. One of the first military highways in the west is planned, extending from Barstow to the range camp, three lanes to accommodate heavy traffic of army trucks and other military vehicles. Five millions will be spent on the range; first camp units will cost \$360,000, it is estimated.

El Centro . . .

Imperial Irrigation district, largest functioning organization of its kind in the western world, is on a cash basis for the first time, since 1923. Annual report of President Evan T. Hewes gives \$708,483 revenue from the district's publicly owned power system; revenue for the irrigation system from all sources amounting to \$2,546,201. Balance of \$1,048,531 was left after deduction of all operating expenses. Progress in expanding drainage system is reported by President Hewes, as well as definite steps to begin development of more than 100,000 acres of virgin land on the east mesa, adjacent to the present irrigated area of more than half a million acres.

The DESERT MAGAZINE

Calexico . . .

Six days of festivity here and south of the border down Mexico way highlight 1941 convention of the International Four States highway association at Mexicali, across the line in Baja California, last week in February. Program ranged from Desert Cavalcade of Imperial valley in this city through annual Mexicali carnival and fishing trip to Punta Penasco on the Gulf of California, with visitors entertained as guests of the Mexican government. Alberto Moreno of Mexicali was secretary of the eighth annual session of the highway association, Harland E. Wells of Whitefish, Montana, president.

Independence . . .

Hunters killed 228 lions in California during 1940, and turned in the skins for payment of bounty. Ninety-nine of the predators were males and 120 females. Since 1910, the state division of fish and game has paid \$205,100 in bounties on 8,634 lions. Four hunters are on the state payroll now. Jay Bruce, of the fish and game division staff, has 600 lions to his credit since his employment 30 years ago. It is estimated that an adult lion will kill one deer a week and will destroy in a year sheep worth \$1,000, provided, of course the varmint is roaming in sheep country.

Brawley . . .

Federal and state departments of agriculture report favorable conditions for California cattle, January pasture and range 30 points higher than a year ago and 13 points above the 10-year January average. Mild weather has caused remarkable growth of feed. Demand for finished beef far exceeds state supplies of fed cattle.

NEVADA

Eureka . . .

At the age of 83 Editor E. A. Skillman of the Eureka Sentinel gives over his desk to his son Willis, third generation of the Skillman family to conduct the newspaper. The Sentinel was founded by Archibald Skillman in 1870. When the founder died 41 years ago, his son E. A. succeeded to the editorship.

Carson City . . .

Historic Nevada relics have been placed on display in the basement of the state library building here. Collected at 79 sites in 10 of the 17 counties of the state, approximately 13,000 objects make up the collection, ranging from skeletal remains of prehistoric people to a great variety of artifacts.

Las Vegas . . .

Biggest business year in history is forecast for southern Nevada, following announcement of construction plans aggregating nearly \$6,500,000. Highway building on seven projects will cost \$1,521,000. Listed are four miles of road, Nelson to Searchlight highway; 17 miles, Searchlight highway to California state line; 7 miles, Nelson down Eldorado canyon to Colorado river; rebuilding Las Vegas-Boulder city highway; new highway from boat landing in Hemenway wash on Boulder lake to Vegas wash; improvement of Salt Lake highway from Crystal to Glendale; 14½ miles highway from Pierce ferry to the lake. Las Vegas airport will cost \$375,000. Largest private project for the city is El Rancho Vegas, cost \$385,000. Camp

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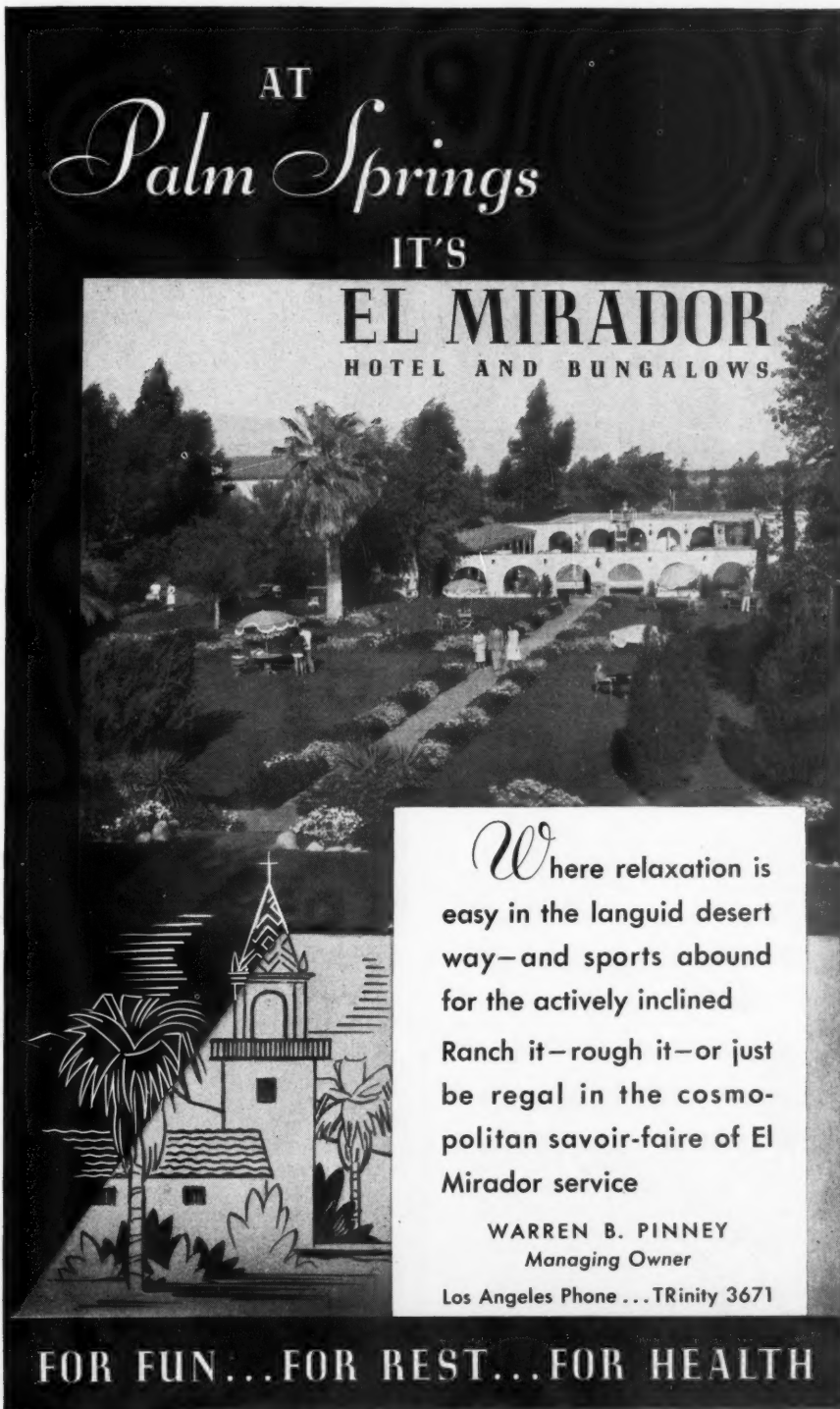
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PALM SPRINGS
CALIFORNIA

Sibert will be built in Boulder City for an army guard of 1000 men at the dam. In Boulder City a \$60,000 laboratory and office for the federal bureau of mines will be completed within six months. There \$1,375,000 will be spent to build the government's manganese pilot plant. In the Vegas wash area construction of the Boggs manganese plant will cost half a million dollars.

Yerington ...

Boys poking sticks into crevices of an old cellar's rock foundation on a hillside near town found \$2,000 in banknotes. Herbert Dunn pulled out, to his astonishment, a sock stuffed with currency when he examined a tin can. Then he found a second sock, also holding more large size, old-style bills. Other grammar school boys, hearing of the "strike" rummaged through piles of tin cans in the vicinity and dug up nearly \$300, also in bank notes.

Boulder City ...

Boulder dam retains top rank as the west's most popular tourist attraction. New peak in number of visitors during 1940 is reported by national park service. Through checking stations of the Boulder dam recreational area 668,027 persons were registered in the past year, topping the 1939 figures by 17,615, former high mark. Nearly two and one half million tourists have visited the area in the past four years.

NEW MEXICO

Santa Fe ...

Radio weather reports from 18 New Mexico points, broadcast every two hours for the benefit of air travel also give aid to motorists. Says Burton Dwyre, state highway engineer: "Our maintenance division office in Santa Fe receives the radio reports giving precipitation, wind velocity and temperature in every part of the state. When the weather is bad we get the reports day and night. We send machinery to points where conditions threaten to become serious. Result is we have cleared snow from more miles of road at far smaller cost than in any previous winter."

Raton ...

Raton's chamber of commerce has fired its heaviest guns at proposal to change the name of Raton pass. The name, says the cofc, "is synonymous with every phase of southwestern adventure, history, development and is known nationally and internationally." To clinch the matter, "It would be about as queer to change the name of Grant's Tomb or Pike's Peak, or Santa Fe trail or New Orleans Mardi Gras ... The best reason for non-action is that there is no need for it."

Albuquerque ...

New Mexico's 1941 state fair will be held here from September 21 to 28, inclusive, according to announcement by Leon H. Harms, general manager.

Gallup ...

Deeds covering last of 11 tracts of Indian land in proposed Manuelita national monument will be on record soon, reports D. W. Van Devanter, state agent directing acquisition of title to the 30,000 acres in the monument area 17 miles west of here. The state must give to the federal government title to the lands as pre-requisite to establishment of the monument.

Albuquerque ...

New Mexico stockmen expect better days. Ranges are in good condition, markets improving. Cattle are wintering in good shape, though heavy snows made stockmen resort to feeding in the northwest section of the state. Shipments out of the state during 1940 totaled 641,997 head, an increase of 14,037 over 1939, says Sam McCue, cattle board secretary. Twenty-four thousand head of cattle are on feed in the state, about 4,000 more than last year.

UTAH

Salt Lake City ...

The United States army will be the world's best dressed. In making uniforms, Uncle Sam is now using fine wool, whereas in the World War of 1917, the medium grades were used. C. J. Fawcett, general manager of the national wool marketing association, is authority for these statements. He told Utah wool growers, meeting here, price outlook for wool is bright.

American Fork ...

New highway note: Plans have been completed for building a sheep trail from the mountains west of Lehi, through Provo canyon to Daniels canyon. Traffic will be heavy, 120,000 woolies traveling the new trail annually, relieving congestion on Highway 91.

Logan ...

In ratio of students listed in agricultural courses to rural population, Utah leads all states of the Union. Dr. R. H. Walker, dean of the school of agriculture, Utah state agricultural college, says he has the figures to show this is true.

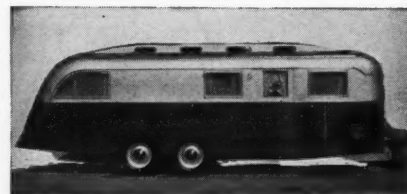
Salt Lake City ...

Deposits in Salt Lake's nine banks and trust companies stand at an alltime high of \$112,599,699.81, with loans showing a gain of 15 percent over a year ago.

Provo ...

Water in Utah lake on January 31 amounted to 203,800 acre feet, the lowest level since 1936, according to Water Commissioner Frank Wentz. Rainfall in the Provo river watershed for the past year was 6.53 inches which is 92 percent of normal. At Salt Lake the precipitation was 7.40 inches or 134 percent of normal.

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Prizes to Amateur Photographers

Each month the Desert Magazine offers two cash prizes for the best camera pictures submitted by amateur photographers. The first award is \$5.00 and the second \$3.00.

Pictures are limited to desert subjects, but there is no restriction as to the residence of the photographer. Entries may include Indian pictures, rock formations, flowers and wild animals, canyons, trees, waterholes — in fact everything that belongs to the desert country.

Following are the rules governing the photographic contest:

1—Pictures submitted in the March contest must be received at the Desert Magazine office by March 20.

2—Not more than four prints may be submitted by one person in one month.

3—Winners will be required to furnish either good glossy enlargements or the original negatives if requested.

4—Prints must be in black and white, 3 1/4 x 5 1/2 or larger, and must be on glossy paper.

Pictures will be returned only when stamped envelopes or photo-mailers are enclosed.

For non-prize-winning pictures accepted for publication \$1.00 will be paid for each print.

Winners of the March contest will be announced and the pictures published in the May number of the magazine. Address all entries to:

Contest Editor, Desert Magazine, El Centro, California.

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BRAWLEY CALIFORNIA

YUMANS WOULD PROTECT HERD OF WILD BURROS

More than 300 citizens of Yuma, Arizona, have signed petitions protesting against the proposed sale or slaughter of wild burros which range over the Kofa mountain area in Yuma county.

The threat to the burros comes from the Arizona livestock sanitary commission which has scheduled a hearing to determine the fate of 100 or more burros in the area. Cattlemen say the wild "canaries" are eating their feed.

H. J. Albert, who is heading the crusade to save the animals, stated that the legislature will be asked to pass legislation protecting them from future wholesale killing in all parts of the state.

Fate of wild burros, found on many desert ranges, is a controversial question in a number of western states. Wildlife conservationists in some areas have complained that the burros compete with bighorn sheep for feed and water, and on that basis have recommended control measures.

ANSWERS TO QUIZ

Questions on page 29.

- 1—Mined from the ground.
- 2—Mortar.
- 3—Father Escalante.
- 4—Creamy white.
- 5—Houserock valley.
- 6—Blue.
- 7—Nevada.
- 8—Pahute.
- 9—Nogales.
- 10—Beaver.
- 11—Tree rings in the roof timbers.
- 12—Calcite.
- 13—Flagstaff.
- 14—Lummi.
- 15—Gallup.
- 16—San Geronio pass.
- 17—Phoenix.
- 18—Rubber-soled shoes.
- 19—Volcanic areas.
- 20—Salt Lake City.

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Gems and Minerals

This department of the Desert Magazine is reserved as a clearing house for gem and mineral collectors and their societies. Members of the "rock-hound" fraternity are invited to send in news of their field trips, exhibits, rare finds, or other information which will be of interest to collectors.

—ARTHUR L. EATON, Editor—

FIELD TRIPPERS INVADE CARGO MUCHACHO AREA

Mine dumps in the Cargo Muchacho mountains in the Southern California desert yielded a wide variety of specimens to members of a combined field trip of the Pacific mineral society of Los Angeles and the Imperial Valley gem and mineral society January 19-20.

Rendezvous for the two societies was the home of Arthur L. Eaton, advisor for the Imperial society, in Holtville. Meeting there at 1:30 p.m. Saturday the caravan motored east through the sand dunes to Ogilby and thence into the mountain area. Camp was at the American Girl mine, now inoperative after having produced millions in gold.

An impromptu program was arranged Saturday evening, around a campfire of ironwood and palo verde.

Sunday the hobbyists scattered like a flock of blackbirds over the mine dumps, finding ore, discarded crucibles, borax beads, soapstone (steatite), glistening pyrite and even a good quality and size of pyrope garnet.

It was difficult to tear away from this interesting location, but Los Angeles was several hours distant, and there were other mines to visit, so all cars headed for the Tumco mines. Short stops were made at the pyrophyllite, talc and again at the kyanite diggings. Talc is much in demand at present in the manufacture of fire-proof shingles. Good and easily obtained limonite crystals were found in the talc.

Tumco mines yielded many varieties of copper, and one specimen of chrysocolla contained a visible vein of gold. The azurite, malachite and chrysocolla were not gem quality except in tiny bits, but made beautiful specimens. Some blue Chalcantite (hydrous copper sulfate) soluble in water was obtained by smashing a huge boulder.

Those who did not have to hurry home drove to the Sidewinder hills on Highway 80 where specimens of almost anything from fossils to gold may be found. These hills have been built up in past ages by the Colorado river whose flood waters brought rubble from far inland depositing it as the current slackened.

A stop was made at the kyanite mine near Ogilby. Kyanite is an aluminum silicate. It generally occurs in long thin usually bluish crystals. It is used to make glaze and parts of sparkplugs. This mine is the only one in the United States where the mineral occurs in scales instead of blades. The mineral is blue, green and brown, but blue predominates. Here also occur limonite crystals—cubes, dodecahedrons and pyritohedrons. Limonite is hydrous iron oxide, called goethite in its crystalline form.

Heading the Los Angeles group were R. H. Milligan, president, and E. B. Hamilton, field trip chairman. Several additional cars of mineral collectors from the Imperial valley society joined the party Sunday morning.

Ocotillo in Tumco district is lush and already in bloom. The desert floor and hills have begun to assume the greyish green tint caused by acres of wild flowers just peeking through the sands, a promise of beauty to come.

OAKLAND PREPARING FOR MAMMOTH EXHIBITION

Eight thousand feet of floor space will be available for exhibit purposes in the beautiful Hotel Claremont at Oakland when the California federation of mineral societies holds its annual convention May 10-11.

Mineral society exhibits are limited to 3x6 feet, with tier arrangement permitted. Amateur mineral collections, cabochons and petrified wood, will be allowed 3x3 feet, large polished work, 3x4 feet. Juniors are given a 2x3 feet space limit.

Each exhibitor is urged to adopt a distinctive and artistic arrangement, and to provide attractive, specially designed cases, rather than rented ones. Rented cases will be furnished where requested in advance, without cost to societies making exhibits. Individual amateurs may obtain standard, commercial type show cases at \$1.25 per half case, 75c per quarter case.

Flat, shallow, table type cases are suggested for cabochons and other small pieces. Two-inch trays, 10x16 inches, hinged together so that they fold like a book, could be constructed from plywood, glass and picture molding. The stones should be arranged in attractive patterns on suitable, neutral colored background, the cabochons being fastened in with Duco cement.

For convention information address Orlin J. Bell, chairman, 2710 Hillegass Ave., Berkeley, or B. E. Sledge, 1438 88th Ave., Oakland, chairman of exhibit arrangements. Other convention officials are Marjorie Welch, secretary; C. C. Bradfield, chairman finance committee; A. D. Fragley, program chairman; Mrs. F. W. Buhn, treasurer; E. J. Hyde, chairman of display; George Higson, hotels and auto courts.

• • •

FIRST LAPIDARY SOCIETY TO HOLD EXHIBITION

The Los Angeles lapidary society held its first birthday meeting on Monday, February 3. Started just a year ago as the first amateur lapidary society in the United States with 16 members it now has 120 members and the membership is closed. The society always precedes its monthly meetings with a dinner and attendance is always about 90 percent in spite of the fact that the members are scattered all over California.

The society will hold the first annual exhibition of its work at the swimming stadium in Exposition park, Los Angeles Saturday and Sunday, March 22-23 from 10 a.m. to 10 p.m. The public is invited and there will be no admission charge. Each member is compelled to exhibit some of the work he or she has done during the past year in order to retain an active status as there is a long list of persons waiting for membership. This exhibition will no doubt be the greatest assembly of lapidary work by amateurs ever placed on display at one time. There will be nothing for sale and commercial exhibitors will take no part in the program, according to president Leland Quick.

The DESERT MAGAZINE

AMONG THE ROCK HUNTERS

Golden Empire mineral society of Chico reports the following officers for 1941: Genevieve Jezler, president; Roy Pearson, vice president; Lucille Fulcher, secretary-treasurer; Beryl Billick, librarian; J. Irving Bedford and Charles Keplinger, directors. Golden Empire is one of the most recent members of the California federation.

A. G. Connell, chemical engineer for Pacific borax company discussed borax refining at the January meeting of Pacific mineral society. He also gave information concerning uses of manufactured products of borax.

Dr. Ernest Bickerdike and Nelson Whittemore gave an illustrated talk on simple identification of minerals at the January meeting of Santa Barbara mineralogical society.

February mineral notes and news, California Federation bulletin, adds to the news of the societies, "Notes on Gems," by Dr. M. J. Groesbeck, an article about chrysoberyl.

Probably the most notable specimen found on the joint field trip of the Pacific mineral society and the Imperial Valley gem and mineral society came from the vicinity of the old Tumco mine. It is a large piece of gem chrysocolla, bright blue in color, and containing an easily visible vein of virgin gold. For once, the dream of the mineral collector came true!

Antelope valley joint union high school at Mojave has a recently organized mineralogy club. Officers are Jack Byer, president; Tom Smith, vice president; Kenneth Spencer, treasurer; Hugh Varty, secretary; Eugene Smith, curator. Their advisor is Robert P. Durbin mineralogy instructor. Interest in mineralogy has justified beginning a second year class. To the laboratory equipment have been added a 12-inch Vreco diamond saw and Covington lap. The club has installed an exhibit in Wescott and Plummer's drug store window.

Holtville union high school started lapidary classes six years ago when six motor and arbor units were installed for cutting and polishing. At first a mud saw was used. This year a 12½-inch Vreco diamond saw was installed. The machine shop boys have made a flat lap and a sphere polishing outfit to add to the equipment. Tools are available for silver work. Semi-annual displays are exhibited by lapidary and mineralogy classes in downtown store windows.

C. M. Brown, mining expert, was guest speaker at the January 13 meeting of Kern county mineral society. His topic, "Recent survey of Kern county war minerals," revealed the part that Kern county plays in the national defense program. T. V. Little and Frank Hoops guided the group on a field trip to the Parkerfield area, southwest of Coalinga, for varieties of jasper.

— PERSONAL —

I hit it rich in Arizona and Mexico. Got the richest, showiest and colorful CHRYSOCOLLA, AZURITE, OPAL, SELENITE, COLEMANITE, WULFENITE, VANADANITE, PYRITE and other material yet! Rock Folks near and far should see this quick. I'm selling it wholesale. So hurry! My diggin's is 401 Broadway Arcade Building, 542 South Broadway, Los Angeles, Calif. Michigan 2264. "ROCKY" MOORE.

J. W. Collins put on a fluorescence display for Santa Monica gemological society at the January meeting. He was assisted by C. Weir and Bill Hawley. Dale Meyers demonstrated and explained a phenomenon called tribo-luminescence: the glow given off two pieces quartz after they have been rubbed briskly together. Mrs. Clarence Harter was elected social chairman, Esther Nielson, assistant. Harry Stein was elected to lead and manage field trips. Several members and guests displayed fluorescent specimens, black lights, polished stones and completed jewelry.

Imperial Valley gem and mineral society enjoyed a field trip February 2 to the Santa Rosa mountains. "Rainbow" rock, calcite, calcareous tufa, barite, hematite, jasper, garnets, fresh water fossils, marble, etc., may be found in this area.

Sequoia mineral society held its annual turkey banquet at Selma February 4. The members put on a most creditable gem and mineral show. Harry Stewart was in charge of a dark-room for a fluorescent exhibit. Pete Eitzen and Jim Harvey of Sequoia society have completed a 15-day field trip covering 3120 miles from Reedley through Las Vegas, Nevada, via Cameron and Carlsbad caverns to El Paso, Texas, thence to Bisbee and home through Yuma, Blythe, Needles, and Ludlow with a heavy load of specimens.

Mineralogical society of Utah, Salt Lake City, elected the following officers at the annual meeting in January: Prof. J. J. Hayes, president; Dr. Olivia McHugh, first vice president; A. B. Gill, second vice president, and director of trips; A. Reeves, secretary; Lucille Olsen, treasurer; Miss M. J. Berryman, historian. After the election, Frank Jacobsen showed kodachrome slides of western parks and A. W. Morton showed colored movies of gold mining and a vagabond hike in a nearby canyon. The society meets first Tuesdays, 8 p.m., in the geology building of the university. Third Sundays are devoted to field trips. January field trip was made to Travertine quarry, near Clive, Utah. This stone, under its trade name, Mexican onyx, has been widely used in Utah's public buildings.

Southwest mineralogists chose Tick canyon for the January 12 field trip. Specimens of howlite and other minerals were found. The 30 members who participated in the trip also visited agate nodule beds near Acton, where they obtained good material. January 17 was social night for Southwest mineralogists who now have 41 paid members.

Robert F. Herron spoke to Los Angeles mineralogical society January 16 on "A description of minerals and their occurrence." On their January 26 field trip the group met at Alpine, California to collect sillimanite and dumortierite. Several publications have been added to the library.

Columbian geological society reports the following officers installed January 16: P. M. Blake, president; Charles O. Fernquist, vice president; Kenneth Featherman, secretary; Clarence E. Kline, treasurer; Robert Childs, Jack Salie, Dale Lambert, directors.

East Bay mineral society of Oakland has invited boys and girls in the Scout troops and the schools of the city to bring in their minerals and cut stones for a junior exhibit to be held April 24. The age limit is 18 years, and prizes are to be awarded. Every entry must be the personal property of the youth who enters it, either collected or fairly earned by the exhibitor. First prize winners will be eligible to exhibit at the California federation display in May.

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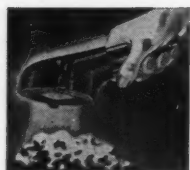
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RAMBLING ROCKNUTS

On a rock-collecting and trading trip through the Southwest with her husband, Bertha Greeley Brown kept a notebook of her experiences—the places visited and the "rocknuts" she met along the way—and is writing about them for Desert Magazine hobbyists. This is the third article in her series.

WHEN we four Rocknuts, Dr. and Mrs. C. T. Lill, my husband, E. K. Brown and I left Seattle for a vacation through the South and Southwest, we made tentative itinerary plans. By the time we had reached the land of "poco tiempo," New Mexico, we were three days behind schedule.

Leaving Albuquerque we traveled north on Highway 85. Out a few miles the sign TURQUOISE POST stood out in bold letters across the front of a building just ahead. E. K. swung in and stopped. A moment later Dr. Lill had pulled his car along beside ours.

"What to heck, E. K.?" he demanded, "I thought we were going to make time today." But I saw a flicker of agreement come over his face when E. K. answered, "We will, but poco tiempo, Doctor, poco tiempo."

The Turquoise Post is well worth the stop. Here is an abundance of Indian rugs, pottery, jewelry, etc., and in addition to this is a real museum of mineral specimens, Indian artifacts (ancient) and historical relics. These are the collection of Bryce Sewell, owner of the post, and with the exception of a few minerals, none of the museum pieces are for sale.

With animation, Mrs. Sewell told us of prospecting trips she had taken with her husband. Too, she gave us a location of petrified wood.

Late the next afternoon I found myself saying, "I think I made a good trade, E. K.—two Oregon thundereggs for five arrowheads."

"Yes, Bee, that's a bargain 'specially when you stop to think the thundereggs were mine."

We laughed with happy spontaneity. Not a single thing could spoil this beautiful day in the Ozark mountains of Arkansas. No thought of the import of the particular date had entered our minds. Later we wondered how this had happened.

Chalcedony rocks about gas stations and in different crystals in windows evidenced the fact we were getting into the quartz crystal territory near Hot Springs.

I had made my trade near Mt. Ida and as we drove along I was filled with pride over my bargain, particularly the "twirler," a vicious looking chert arrowhead made in spiral shape so it would cleave the air in whirling motion and tear an ugly hole in whatever it hit—a killer.

Eight miles northwest of Crystal Springs, we stopped again beside a bench, close by the roadside and covered with small crystals. A comely, sunbonneted woman looked over a picket fence and started an explanation.

"Them is crystals the chillens find hereabout. We sell them to get money for school pencils."

This was enough to interest E. K. He reached for his reading glass and started at once to examine them. I knew he would buy. I felt the woman's eyes on me and as I glanced up, I met an earnest, questioning look.

"What you all think of the war?" she asked. War? It had been days since I had thought much about it.

"My boy signed up for the draft today," she continued, "and it sorter touches a mother's heart." "Yes," I answered. "My boy signed up for the draft too, and it does touch a mother's heart." It was the 16th of October and until then I had forgotten.

E. K. selected the crystals he wanted, paid for them and inquired if there were any larger ones to be found.

"Yes, down the road 'bout two miles. That feller has crystals and what I mean, Mister, he riley has some crystals."

After dismissing E. K. with this information she turned to me and said, "I reckon I ain't seed you before but it 'peers I knowed you allus."

I understood that Ozark mountain mother for that day she and I stood, with thousands of other American mothers, in a real shadow of the world's storm clouds.

Garland Milholen was the "feller" down the road who had the unusual crystals. With great pride he showed us the most wonderful of all his stock.

This is "the crystal that went to the fair." Milholen told of its exhibition at the New York fair, and, "It sure attracted attention," he asserted. No one would dispute this. The specimen is, in fact, two double terminated crystals, several inches long and grown through each other in such a manner they make a perfect crucifixion cross. It is perhaps the most significant crystal ever found and we are told the owner has refused a thousand dollars for it.

Quartz, a silicon dioxide, is the most common of all minerals. It is almost ubiquitous and it has a larger number of distinct varieties than any other mineral. In and about Hot Springs, Arkansas, is probably one of the greatest quartz crystal areas in the world. Here, warm silicated waters have crystallized out in underground caverns and seams. The crystal structure is all the

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way from frost-like covered surfaces to actual boulders weighing many pounds. We saw one group of crystals estimated at six hundred pounds.

Many times crystals are crowded, massed and ill shaped like a patch of over rank garden flowers, many are grown in twos (twinned) but some are clear and perfect in their hexagonal beauty. The same law that unfolds five petals to a single prairie rose, shapes the quartz crystal into six sided glass-like gems.

Just out of Hot Springs, on the way to Little Rock, we came upon a place called The Indian Village. In reality it was an Indian Post. I thought it was an old grist mill, for a good sized stream flowed through one corner of the building, making a tumbling sound of water that could be heard all over the store room.

Again I traded some of E. K.'s material for things I coveted. This time it was glass goblets with air bubbles, hair lines and linen marks that revealed their age.

E. K. got two tommyhawks. His smile was rather wry when he explained they were for the two grandsons. I thought, woe unto the brown tribe when those two little Indians go on the warpath in the future.

My prowling in "The Indian Village" was brought to a sudden end when E. K. looked at his watch, started quickly for the car and hurled in my direction. "Do you know what time it is? We've got to be going."

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Cogitations . . .

Of a Rockhound

By LOUISE EATON

● Rockhounds is funny. When they've cut an' polished a specimen, you'd think they'd created it, right from the beginnin'. The more they looks at it, the better they likes it an the valuabler it grows. "That baby," says the rockhoun, "is worth just about ten bucks." "Well, some day," says you, "you may need shoes pretty bad, an' then ten dollars'll come in mighty handy." "Sell this beauty!" gasps the rockhoun: "Oh no! Nope, I wouldn't sell this honey. No siree. I'd jus put 'er right back on my shelf an' go barefoot."

● Rockhouns is adaptable an' versatile. If they lives wher ther's more lava than anything else they collects lava in all its forms, such as pumice, lava bombs, obsidian an' needles. Also thunder eggs, 'cause those're found in volcanic regions. If they lives at the beach, they finds beach stones—jaspers an' agates. Beach folk trades for thunder eggs. If they inhabits minin' districts they goes in for ore specimens an' crystals. But rockhouns in the desert is most fortunate for they has lava an' obsidian, thunder eggs, fossils, agate, jasper, chalcedony, petrified wood, crystals an' everything just lyin' aroun' loose. Desert rockhouns is most versatile of all.

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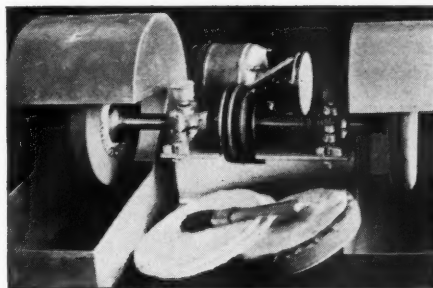
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By RANDALL HENDERSON

WHEN Congressman Harry Sheppard introduced a bill in the House of Representatives providing for a \$500,000 veteran's hospital on the Mojave desert of California, civic leaders in Banning dug into the archives of the past to see if they were eligible to furnish a site for the new institution.

Their conclusion was that it would be easier to delete the word "Mojave" from the bill than to prove their town was on the desert of that name.

In the office of the Desert Magazine where it is often necessary to define the boundary between the Mojave and Colorado deserts we regard the Little San Bernardino and Eagle mountains as the dividing line. But if we were asked to furnish conclusive proof that we are right, we would be in an embarrassing spot.

The Mojave desert is well named—it was the happy hunting ground for the Mojave Indians. I have never been entirely satisfied with the naming of the Colorado desert. It is not an accurately descriptive word in the first place—and it is often confusing to those not well acquainted with the geography of the Southwest.

While I am reluctant to change long-established place names, if the time ever comes when a new name is desired for the Colorado desert area, the logical selection would be Cahuilla—pronounced cah-wee-a. Much of this region was the homeland of the Cahuilla Indians, who lived around the shores of the ancient Lake Cahuilla—now Salton Sea.

* * *

While we are on the subject of place names, I read the other day that a Colorado man has proposed the changing of the well known Raton Pass to "Skyline Drive." I'll bet he is a real estate man. And I hope the folks in Colorado and New Mexico will put a muzzle on him and cinch it up so tight he cannot even whimper.

* * *

The makers of automobiles would have had an unpleasant day if they had been out with a party of desert campers with whom I spent a weekend recently. We were off the paved road, following an ungraded desert trail. Two 1941 models of a very popular medium-priced car nearly ruined their crankcases along the road.

The center of the trail was not abnormally high—but the cars just couldn't take it. One driver arrived in camp late and reported that he "lost a lot of time picking up the hardtack crumbs some blankety-blank prospector had dropped in the middle of the road."

I would like to take one of those eastern automobile engineers on a personally conducted tour, just to show him that the desert Southwest, comprising one-fourth the area of the United States,

still needs automobiles which don't hang up on a pebble the size of a turkey egg.

One of these days an enterprising manufacturer is going to learn about this desert—and turn out a car that will become a best-seller in western United States.

* * *

The desert has a strange fascination for some people. Writers and poets down through the ages have been trying to express in words the mysterious thing this desert does to those who have close association with it. If ever a board of super-critics is created to judge the relative merits of the descriptive phrases that have been used, I will want to enter this quotation from a recent manuscript which came to my desk from Bertha Greeley Brown of Seattle. She wrote.

"Under the spell of lurid skies, purple haze and mauve desert sinks, our imaginations are loosed from the confines of time and space. Majesty gives birth to idealism."

If you are one of those who have been charmed by the intangibles of the desert, and have wondered why, there is a simple and very beautiful answer.

* * *

Threatening Rock has toppled over. The giant slab of sandstone in Chaco National monument, well known to thousands of travelers, fell on January 22 after its foundations had been weakened by several weeks of rain.

Archaeologists and others who have long been concerned lest this pinnacle in falling would shatter the partly restored ruins of ancient Pueblo Bonito will be gratified to know that little damage resulted except to the four-story north wall.

Nearly 1000 years ago the ancient tribesmen who dwelt here built crude walls of masonry in an apparent effort to avert the tragedy of the 25,000-ton slab falling on their village. More recently the men in the park service have discussed engineering plans for tying the rock to the wall from which it had broken apart.

There will be regret among those who have visited Chaco monument over the loss of this striking landmark—but there is consolation in the thought that the same natural elements which destroyed this scenic pinnacle are at work creating a thousand others no less remarkable.

* * *

I think the weather man got his signals mixed this winter. He's been deluging this desert with a lot of water that belongs somewhere else. We welcomed the first few inches of it—they gave us the assurance of a bountiful wildflower display during the spring months. But if he doesn't turn off the faucet very soon the desert will be growing water lilies instead of primroses.

Yes, I am worried. How can I publish a Desert Magazine without a desert?

BOOKS OF YESTERDAY AND TODAY

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SOME OF THE WEST'S GUNMEN WERE OVERRATED

"Gunfighters," writes Eugene Cunningham, "fall in two classes—those with, and those against the law. Just as environment bred the gunfighter, so did it decide whether he was to be on the law's right or left hand. And it was not uncommon for a man chased out of Texas for cattle-rustling to appear some time later in a Kansas town as a peace officer." Such were the men who led the settlement of the West.

In his latest book, *TRIGGERNOMETRY*, Eugene Cunningham gives an unprejudiced and unbiased account of some of the foremost of the gunslingers of the West in the days when "the one who could draw the fastest was the only one who'd live." Himself a western man who has known the feel of pistols and rifles since childhood, Cunningham is well qualified to write of those fearless men who played such a colorful part in the turbulent development of the West. Many of his subjects he knew personally, others he learned about through first-hand acquaintances. Not only does Cunningham as a student of the West depict the deeds and actions of these men, but as a student of human nature he attempts to show what quirks of fate and circumstance shaped these men's destinies.

In his attempt to give credit only where it is due, Cunningham explodes many long-established myths regarding the virtues of the better-known and more highly-publicized gunfighters. Wild Bill Hickok, for instance, was a good shot and fairly fast on the draw, but many men of his day could have killed him in an even fight. Hickok was never the "silent" type of western man, and most of his notoriety came from his own press-agency.

As for Billy the Kid, Cunningham states that the 21 notches on the Kid's gun were there because he "never gave a sucker an even break." The Kid was undeniably a good gunman, but besides that he was clever and tricky. Rare indeed were the times when he met a man on an equal footing and shot it out with him.

And on he goes down through the list — Bill Longley, Wes Hardin, Ben Thompson, Ranger Captain John R. Hughes, and 13 other of the fastest shooting, most daring and fearless of the gunslinging breed. Giving credit to those who deserved it, belittling those who have been overrated, Cunningham vividly depicts the history of the west as recorded in the lives of its heroes.

Included in the book are "Technical Notes on Leather Slapping as a Fine Art, gathered from many a Loose Holstered Expert over the Years." In these notes are descriptions of the various prestidigital techniques practiced by gunfighters on both sides of the law. The "road-agent's spin," the "border shift," "pinwheeling," "rolling," and various types of holsters and quick draws are explained with drawings and diagrams.

Published by Caxton Printers, 1941. Complete bibliography. \$4.00.

CORONADO MARCHES AGAIN IN BOOK OF POETRY

To evoke the spirit of the caballeros who first entered the Southwest 400 years ago, Pearle R. Casey has chosen the medium best suited to her subject. Her epic poem, *CORONADO*, published in December 1940 by the Banner Press at Emory University, Atlanta, Georgia, illuminates the Entrada and Salida of Coronado and his company, 1540 to 1542.

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The sustained low key of Castañeda's chronicle is occasionally brightened by lyrical flashes of golden hopes, as in long passages come the voices of Cabeza de Vaca, Marcos de Niza, Cárdenas, the Turk, the letters of Alvarado and Coronado. These personal viewpoints are set against a background of narrative which is at once objective and realistic.

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WOULD PROVIDE WRITTEN LANGUAGE FOR NAVAJO

The need for a grammar of the Navajo language has resulted in a collaboration by Gladys A. Reichard and Adolph Dodge Bitanny. The first published result of their work is a 22-page booklet, *AGENTIVE AND CAUSATIVE ELEMENTS IN NAVAJO*, published in 1940 by J. J. Augustin, New York.

The present paper discusses the fundamental points of their larger work, which is based on an extensive analysis of the Navajo language, a dictionary compiled from the results of that analysis, and a large body of texts.

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For children in the elementary grades a very delightful Nature book, *GREY SMOKE, THE COYOTE OF EL CORONEL*, recently has been written by Charles Willard Diffin and published by the Garden City Publishing company of New York. This is a new type of pet story, about a coyote found by an Indian boy and taken home and raised as a pet. Crayon illustrations by Alyn add much to the quality of the book. 50c.

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THE ZONING TREATMENT IN NAVAJO BLANKET DESIGN is the latest bulletin in the popular series published by the Laboratory of Anthropology at Santa Fe, New Mexico. H. P. Mera, author of this Indian blanket series, has summarized the development and main variations of this simplest form of decoration. Six examples, chosen from well-known collections, illustrate the 15-page booklet. 25c.

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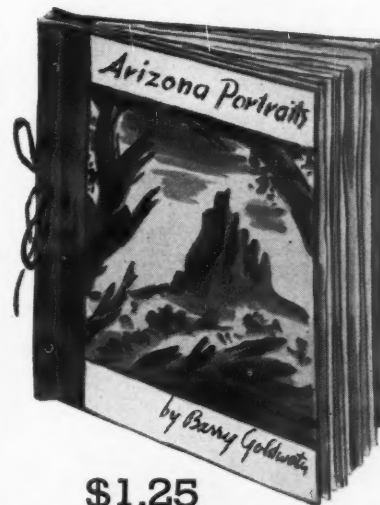
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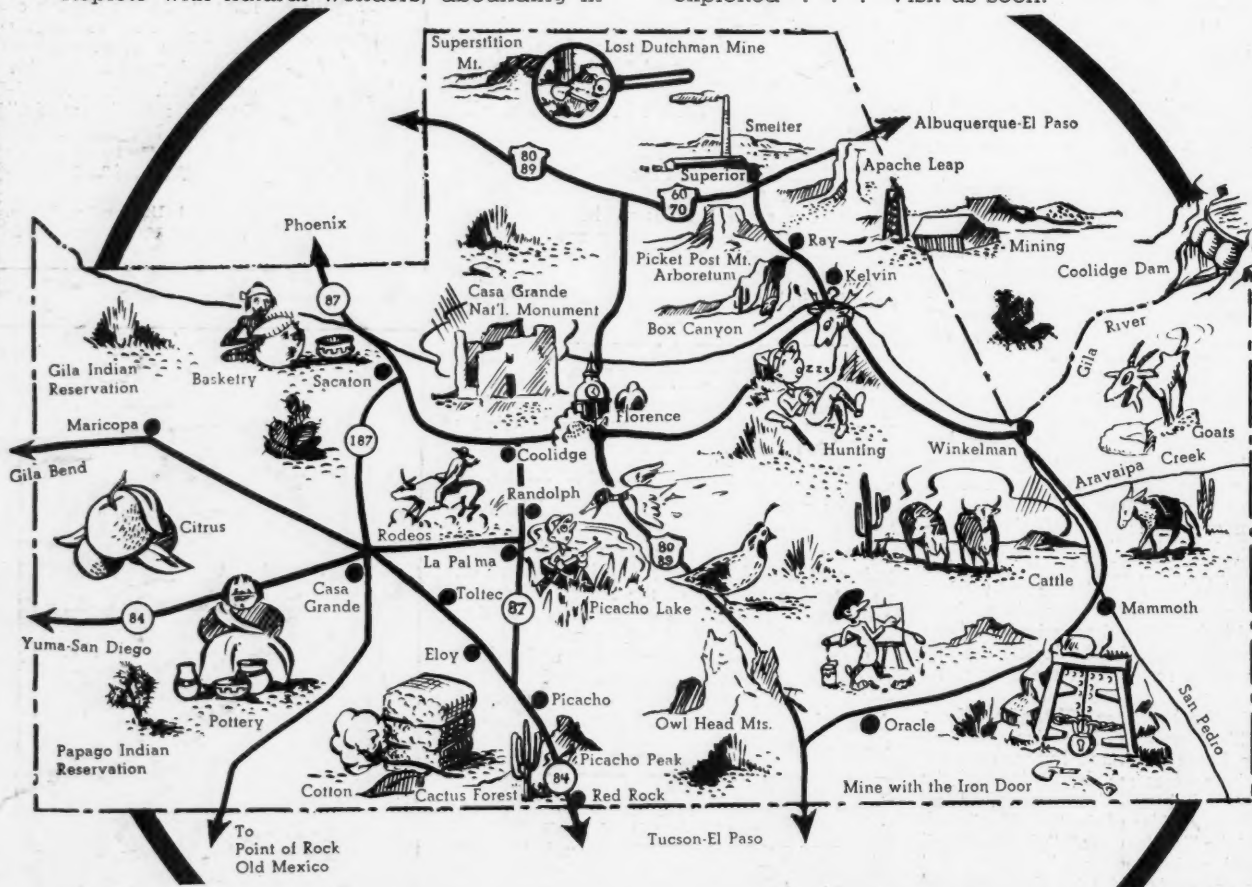
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